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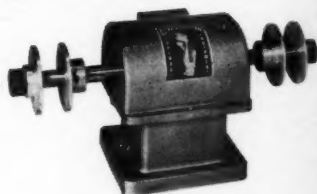
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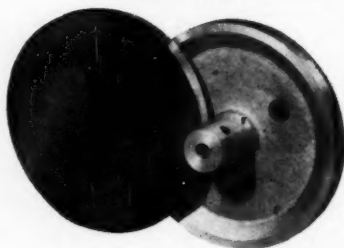
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PETER ZODAC, Editor and Publisher

America's Oldest and Most Versatile
Magazine for the Mineralogist, Geol-
ogist, Lapidary.

Published Bi-Monthly

OFFICIAL JOURNAL



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Lapidary Societies

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MAY-JUNE, 1961

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CHIPS FROM THE QUARRY

MIAMI MINERAL & GEM SOCIETY TO CO-HOST BIG MIAMI CONVENTION

Miami Mineral & Gem Society, Florida's oldest and largest club in this field, voted unanimously at their March 20th meeting to "take an active part" as co-host with Gemcrafters of Miami, to the combined conventions and shows of the Eastern Federation of Mineralogical & Lapidary Societies and the American Federation of Mineralogical Societies. Henry B. Graves, President of the Host Society and of the American Federation, extended the invitation and hails its enthusiastic acceptance as tremendous assistance in making the 1961 show in Miami an outstanding affair.

The new co-host is a charter member of the Eastern Federation and brings to the welcoming group a large number of active and talented persons including many blue ribbon winners in Regional and National competition.

Henry B. Graves
Publicity Chairman

R&M on a pedestal all its own!

Editor R&M:-

I would never miss *one* issue of R&M and I would never part with a single back issue! Although I have read them from cover to cover, they are indispensable reference items for field trips, mineral identification, etc., etc.

Also, through R&M I have "met" by mail dozens of wonderfully generous and intensely interested collectors with whom I have traded specimens, viewpoints, and letters of "gossip".

In my estimation, no other mineral magazine can compare with R&M and I have read them all!

Mrs. Cecilia Duluk
6700 Amboy
Dearborn 6, Mich.

CRYSTALS

Oh! How one's heart stops
When one views the majesty of the
Mineral Kingdom
All Colors, all shapes,
But none more graceful
than crystals
Bristling crystals
Which build the foundation of civilization
Oh! One must see the
majesty of crystals
To know true beauty of nature.

Richard Clair
Owego, N.Y.

Cover photograph:—An Aggregate of rough smoky quartz crystals from the A. C. Perham mine near West Paris, Maine. The outlines of such aggregates often suggest common and well known objects.

American Federation of Mineralogical Societies 1961 Junior Essay Contest

Once again the American Federation of Mineralogical Societies is sponsoring a Junior Essay Contest, open to any boy or girl, 15 years of age or under as of June 30th, 1961.

RULES

1. Any boy or girl, 15 years of age or under as of June 30, 1961 is eligible to compete.
2. Each essay shall be entirely the work of the person entering the contest.
3. The subject of the Essay shall be: "Rock-hounding is my Hobby".
4. The essay shall be between 200 and 300 words in length and shall be judged on the basis of:

Theme	40%
Neatness, spelling, grammar	20%
Composition	10%
Originality	30%

5. Prizes will be awarded at the 1961 convention of the American Federation at Miami, Florida, August 10th through August 13th, 1961.
6. Contestants need not be present to win. If winners are not in attendance prizes will be mailed.
7. Cash prizes to be awarded will be as follows:

First Prize	\$25.00
Second Prize	20.00
Third Prize	15.00
Fourth Prize	10.00
Fifth, Sixth, Seventh and Eighth Prizes,	\$5.00 each
8. Deadline for mailing entries will be midnight June 15th, 1961.
9. No entry blanks are required. Mail your entry to:
Dorothy C. Craig, Contest Chairman
4139 S. Van Ness Avenue
Los Angeles 62, California
10. All manuscripts submitted will become the property of the American Federation of Mineralogical Societies, to be used in any manner they may see fit.
11. The decision of the judges shall be final.

COMING EVENTS

June 2, 3, 4, 1961 — Rock Springs Gem & Mineral Club State Show will be held in the Sweetwater County Fair Bldg., north of Rock Springs, Wyo. For further information contact Mrs. Hans Peterson, 81 Pine, Rock Springs, Wyo.

June 3, 4, 1961 — Franklin Symposium, Franklin, N. J. See ad. p. 313 this issue.

June 3, 4, 1961 — The Grand Junction Gem & Mineral Club will hold its Annual show in the Lincoln Park Auditorium, Grand Junction, Colo. For details contact the Publicity Chairman, Donald F. Crain, Box 2, Grand Junction, Colo.

June 9-11, 1961 — Annual Show of the Rocky Mountain Federation of Mineralogical Societies in Casper, Wyo. Show Chairman is William Guthrie, 318 S. Fenway, Casper, Wyo.

June 10, 11, 1961 — The Estero Bay Gem & Mineral Club of Morro Bay, Calif., will hold its 2nd Annual Show at the Veterans Building, 9th St., Morro Bay, Calif. For details contact the Secretary, Mrs. C. A. Diebold, 2636 - 9th St., Rt. 1, Morro Bay, Calif.

June 24, 25, 1961 — Rollin' Rock Club Mineral Show (Eastern Seaboard) will be held at Onyx Cave, Berks County, Penn. For further information contact Mrs. H. Norman Michel, 579 Chestnut St., Kearny, N. J.

June 24, 25, 1961 — California Federation of Mineralogical Societies, 22nd Annual Show. Los Angeles County Fairgrounds, Pomona, Calif.

June 29, 30, July 1, 2, 1961 — Midwest Federation 21st Annual Convention will be held at the Saginaw County Fair Grounds, Saginaw, Mich. For further information contact the General Chairman, Harry H. Sprague, 11307 Swan Creek Rd., Rt. 5, Saginaw, Mich.

July 7, 8, 9, 1961 — Utah Federation Mineral, Gem and Rock Show, Utah National Guard Armory, 1523 Sunnyside Ave., Salt Lake City, Utah. For details contact the Publicity chairman, Dr. Olivia McHugh, 1811 E. 9th So., Salt Lake City 8, Utah.

July 15, 16, 1961 — 2nd Heart of Conn. Gem and Mineral Show, will be held in Moodus, Conn. For information contact Mrs. Robert P. Gallant, Box 32, Moodus, Conn.

July 22, 23, 1961 — Rockhound Roundup. To be held at Swift River Valley Dist. School, Roxbury, Me. For details contact George Dubois, 27 Granite St., Mexico, Maine.

Aug. 2-5, 1961 — 3rd Annual Mineral and Gem Festival, Spruce Pine, N.C. For details contact Chamber of Commerce, Spruce Pine, N.C.

Aug. 10, 11, 12, 13, 1961 — Eastern Federation of Mineralogical and Lapidary Societies and American Federation of Mineralogical Societies. Combined Convention and Show. Miami Municipal Auditorium. Gemcrafters of Miami, Florida, hosts.

Aug. 19, 20, 1961 — Denver Gem and Mineral Fair sponsored by the Colorado Mineral Society, will be held at the Jefferson County Fairgrounds, 15200 W. 6th Ave., Hwy 6 between Denver and Golden. For further information contact Muriel Colburn, 2821 S. Jackson St., Denver 10, Colo.

Aug. 26, 27, 1961 — Atlantic City Gem & Mineral Exposition will be held at the Ritz-Carlton Hotel (Convention Hall), Atlantic City, N. J. For information contact Marvin 1, Hume, P.O. Box 463, Atlantic City, N. J.

Sept. 23, 24, 1961 — 4th Annual Show of the Rib Mountain Gem & Mineral Society, in the Youth Bldg., Marathon Park, Wausau, Wisc. For details contact Show Chairman, Ron Hoffman, 933 S. 5th Ave., Wausau, Wisc.

Oct. 6, 7, 8, 1961 — The Indiana Geology & Gem Society will be host to a Midwest Federation "Rockrama" to be held in the Agricultural Building at the Indiana State Fairgrounds, Indianapolis, Ind. For details contact the Publicity Chairman, Marvin R. Gatheridge, 3226 Broadway, Indianapolis 5, Ind.

DES MOINES '62' — The Des Moines Lapidary Society will be host to the Annual Convention of the National and Midwest Federations of Mineralogical Societies in 1962. Date and place will be announced later. For details contact the Secretary, Mrs. Virginia Hunt, 4145 - 4th St., Des Moines, Iowa.

VISITING ROCKHOUSES WELCOME

The following subscribers would be delighted to have rockhounds call on them when passing through their cities. If any one else wants his name added to the list, just let us know.

- Bill & Alta Aulsebrook, 1/4 mile west of Hwy 7 on Lake Hamilton at the "Pretti Point" turn sign, Hot Springs, Ark.
- J. J. Brown, Rt. 1, Box 202, Benton, Ark.
- John & Clara Roder, Hwy 7 North, 6 miles from downtown Hot Springs, Ark.
- Mr. & Mrs. Howard Kidd, Riverside Cabins, Murfreesboro, Ark.
- CWO Vernon R. Braun, 9004 Rosewood Drive, Sacramento 19, Calif.
- Mac & Maggie McShan, 1 Mi. west on Hy. 66, Needles, Calif.
- O. A. Reese, 806 E. Boulder St., Colorado Springs, Colo.
- F. J. Strah, Buena Vista, Colo.
- William Guild, Director The Science Center, St. Petersburg, Fla.
- P. W. Holstun, 5235 Attleboro Ave., Jacksonville 5, Fla.
- Mrs. John C. Lawrence, 2311 Arcadia Dr., Miramar, Hollywood, Fla.
- Miss Marion McEntire, 349 N. Elm St., Commerce, Ga.
- Charles Johnson, 1033 Seminole Trail, Frankfort, Ky.
- Albert & Emily Bettey, 139 Hale St., Winchendon, Mass.
- Raymond J. Crisp, 9 Gilletts Lake, Jackson, Mich.
- Mr. & Mrs. Stanley Oman, Little Girl's Point on Lake Superior, Saxon, Wisc. (16 miles north of Ironwood, Mich.).
- Hjalmer Bergman, Mineral Rock Gardens, Ely, Minn.
- Gust Korpi, 5th St., Box 132, Soudan, Minn.
- Mrs. Lawrence Shepard, Bo-vey, Minn.
- Merryl & Mary McCoy, RR 3, Kahoka, Mo.
- Miss Irma Painter, 1315 Burlingame Pl., Burlington, N.C.
- Thurston Smith (12 yers.), Hillsboro, N. C.
- Norman E. Dubie, Jr., 44 Summer St., Lancaster, N. H.
- Mr. & Mrs. Charles Ashton, Northwest Main St., East Douglas, Mass.
- Miss Edna M. McDonald, 626 Kellogg S.E., Grand Rapids 6, Mich.
- Rev. M. Everett Corbett, Acworth, N.H.
- Lewis F. Valachovic, 110 Burton St., Johnstown, N. Y.
- Edwin K. Kraul, La Cima Motel, A.P.O. 344, Chihuahua, Chi., Mexico.
- Egbert McElroy, RFD 1, Box 3, Monroe, N. Y.
- Thomas W. Carroll (age 16), 101 N. Chestnut St., Mount Olive, N. C.
- Herby Bolik, 26 Wilson Drive, Morganton, N. C.
- Paul H. Hughes, Pixie Motel, Linville, N. C.
- Mr. & Mrs. W. H. McArthur, 605 Caroleen Rd., Forest City, N. C.
- Melvin E. Wagner, E. Main St., New Freedom, Pa.
- Ronald N. Cibik, 427—3rd St., Leechburg, Pa.
- Mr. & Mrs. A. B. Carson, 12 Catechee Ave., Greenville, S. C.
- Rev. Theo. H. Judt, 520 N. Washington Ave., Scotland, S. D.
- V. Sabin, 723 Steves, San Antonio, Texas.
- Dr. & Mrs. H. R. Thomas, Keith Lane & Cedar Springs Dr., Athens, Tenn.
- Larry Volkert, 54 N. Pleasant St., Middlebury, Vt.
- Nelson R. Ionge, 5 Leonard Ave. Springfield, Vt.
- James T. Fulton, 829 N. 18th, Coeur d'Alene, Idaho
- Clyde V. Downing, 500 W. 14th St., Carroll, Iowa.
- Anthony Gricius, 4426 Montana St., Chicago 39, Ill.
- John H. Kaiser, East 3rd St., Sheridan, Ill.
- Ralph Dugan, 1338 Franklin St., Columbus, Ind.
- Walter Reeves, R 3, Greencastle, Ind.
- Susan Tranter, 2 E. Walnut, Sharpsville, Ind.
- Mrs. Bryce Allen, Box 486, Tribune, Kans.
- Mrs. Louisa Stevens, 1 Simon St., Nashua, N. H.
- James B. Moore, West St., Antrim, N.H. Phone 154
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- Richard C. Johndy, Cascade Road, Lake Placid, N. Y.
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- Bobby Parker, Evergreen Ave., Rye, N. Y.
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- Malcolm Arnett, Fremar Art Studio, Corydon, Ky.
- Randolph E. Caney, 3rd 21 Lancaster Ave. West Springfield, Mass.
- Joseph Skaritz, Hwy 35, Box Clinton, N. Y.
- 36, Seneca Mobile Manor, Mrs. M. L. Sheiron, Hwy. 82, 8 miles east of Hamburg, Ark.
- Donald F. Crain, P.O. Box 2, Grand Junction, Colo.
- Mrs. F. J. Parke, P.O. Box 362, Altamonte Springs, Fla.
- Joe Monteith, Box 31, Gilkey Sub-Sta., Hwy 221, Rutherfordton, N.C.
- Quinton J. Stephenson, Box 237, Garrysburg, N.C.
- Miss Janet Herbst, 4359 Wooster Rd., Fairview Park 26, Ohio.
- Jesse Lininger, Jr., R.D. 3, Dillsburg, Penn.
- Susan Zinn, R.D. 5, Hanover, Penn.

ROCKHUNTING IN HONDURAS

By VERTREES YOUNG

P.O. Box 1109, Bogalusa, La.

Lying athwart Central America, with its long north coast washed by the Caribbean and its much shorter south coast by the Pacific, the beautiful Republic of Honduras is well nigh virgin territory for the rockhound. I say "well nigh", for the Spaniards, with their nose for gold and silver, had worked out most of the easily accessible precious metals. Their diggings are still visible here and there along the benches of the rivers. What they missed the Indians have since washed out, in the regions where habitation is feasible. In Eastern Olancho Province and the easternmost province of Colon, known as the "Mosquitia", the valley of the Patuca River and its tributaries is still the scene of search for placer gold, although now scientific exploration by geologists has replaced the keen "noses" of the early conquistadores.

The day before Thanksgiving, 1959, found me in the town of Olanchito on the banks of the Aguan River, about fifty miles inland from the north coast. My mission was to supervise the aerial photography of more than a million acres of pine timber in the mountainous province of Olancho. A Mexican company, Cia. Mexicana Aerofoto, S. A., had been engaged to do the job. A pilot, a photographer and a mechanic, equipped with a twin-engined Beechcraft and two aerial cameras, were assigned to the work. The problem was made difficult by the mountainous nature of the country, and the fact that the warm air from the Caribbean coming in from the north and rising over the mountain ranges made cloud cover the general rule. Photography had to await a south wind or openings in the clouds. The complete absence of roads in the region and of easily identifiable landmarks made it extremely difficult for the pilot to be sure of his location, with the result that gaps occurred in the photographic coverage which could only be detected when prints of the flight

strips were received back from Mexico City. Then the attempt had to be made to re-fly the area, as breaks appeared in the clouds.

Altogether, thirteen weeks were consumed in the effort but in the end, a fairly complete patchwork quilt of aerial photographs was obtained which permitted the construction of a "mosaic" on which the various timber types could be outlined and measured as to area. Subsequently a crew of eleven foresters with two helicopters landing in open spots in the timber made sample cruises in the various timber types, so that a rather accurate estimate could be made of the total volume, size and quality of the pine timber.

While waiting for favorable breaks in the clouds, I had opportunity to study and practice Spanish in the mornings, prowling the stream beds in the afternoons in search of rocks and minerals, and study historical geology in the evenings.

The geology of the country was beyond my limited capacity to unravel. Along the north coast, mountains rising 7000 feet in the air and topped with limestone cliffs gave mute evidence of an ancient upthrust from below sea level. Elsewhere volcanic tuff and ash showed the result of widespread volcanic activity. Knife-like mountain ridges studded with small fragments of milky quartz embedded in clay indicated de-composition of a granite foundation. Near the top of the mountain on whose southern slope lies the beautiful capital, Tegucigalpa (Silver Mountain), a strata of boulders overlain by clay indicated the uplift of a former lake bottom. A similar strata appeared along a road cut bordering the airport at the base of the mountain.

The rock hunting near Olanchito yielded numerous chunks of bright to dark red jasper from the mountain slopes north of town. The rocky stream beds contained limitless amounts of rhyolite of practical-

ly every color save blue, conglomerate and breccias of green, lavender, red and brown, limestone veined with quartz, bits of chalcedony and an occasional piece of green serpentine, petrified wood and obsidian. Along the edge of a dolomite cliff some nice specimens showing dendrites were broken out.

To the native Hondurians a rockhound on the prowl was quite a curiosity. "Oro?" (gold) was their invariable query. Frequently the area of hunting was limited by the presence of Indian women doing their laundry in the river, when close approach seemed a bit indelicate. On one occasion two little naked girls decided to help with the search. The mother tied a sack around the 8 year old but the 3 year old assisted without handicap of clothing.

After seven weeks in Olanchito (during which I lost 14 pounds), it became advisable to move our base of operations from Olanchito to Juticalpa. The northern half of the area had been approximately completed and a basing point in the southern half would permit better observation of the weather in that region.

At the same time, I found it necessary to make my headquarters in Tegucigalpa to maintain better liaison with Mexico City and to expedite the forwarding of film and the receipt of prints. Two other problems demanded attention—the investigation of a site that our management forester, Thurman Bercaw, had selected for the camp for the foresters, and a study of possible road routes into the timber in the southern portion of the area. This work brought me into the upper reaches of the Telica River near the town of Salama and into its lower reaches near Juticalpa.

Rock hunting in this region was even better than in the Aguan Valley. To the specimens already gathered I was able to add epidote, sard, jasper and white chalcedony, and fragments of banded agate, although I never found (or perhaps failed to recognize) any complete nodules. I have often wondered how much I passed up due to unfamiliarity with its unfractured appearance.

At about this point, the difficulty of communication with Mexico City by Tro-



Photo by the author

HONDURANIAN PEBBLE PUPS!

pical Radio Telephone made a trip to Mexico City imperative. Since I had been unable to return home for the Christmas holidays, I had my patient and loving wife, Sylvia, join me in Mexico City and return with me for a short visit in Tegucigalpa. In four days she met more people and made more friends in "Teguc" than I had in my entire stay!

Her presence was the excuse for a week-end trip to the beautiful Lake Yojoa, about 125 miles west of Tegucigalpa. The road winds across several ranges of mountains covered with thick deposits of volcanic tuff. We stopped for lunch beside the swift-flowing Comayagua River where we were quickly joined by a small group of Indian children. Sylvia in her cavernous purse found some small gifts for the youngsters, whereupon the eldest girl disappeared, to return shortly with a half gourd filled with tiny grains of snow white popcorn—popped! Rock hunting in the river bed was interrupted by the arrival of a large herd of very determined looking cattle. The herdsman had preceded them and sprinkled salt on top of most of the larger boulders and the bulls and cows galloped each to a rock—and this two-legged rockhound took to cover, but fast! However, when the cattle had departed and search had been resumed, some very interesting boulders of black chalcedony and opalized rock were found, which later were discovered to fluoresce green under S.W. ultraviolet light.

Following the completion of the aerial photography, two other trips were made to Honduras—one in late March to supervise the construction of a camp to house the forestry party and another in early May to see how they were getting along with the timber cruise. During the total stay of nearly sixteen weeks in that delightful country, four other excursions were possible. The first, on New Year's day, was to the abandoned New York-Honduras Rosario silver mine high in the mountains about forty miles east of Tegucigalpa. The trip by car was breathtaking and beautiful. I had hoped to explore the mine dumps but most of the waste rock had been dumped from the

mine tunnel entrances to the base of an almost perpendicular mountainside and time did not permit a descent to the bottom. This mine operated for many years and over \$80 million worth of silver was taken from it.

The second excursion was to the silver mine not far distant from Rosario, operated by a Mr. Paul Bundy from the State of Washington. I descended with him into the mine and after about 20 minutes, the sight of the badly crushed rock columns which had been left to support the roof made me very happy to regain the open air. The vein dips at a sharp angle and mining is conducted on five different levels.

The third rock hunting trip was to the south coast and along the Pan American Highway, almost to the Nicaraguan border, another beautiful drive through scenery resembling that encountered in the Southwest United States. In a stream bed I found several beautiful specimens of red jasper in combination with blue chalcedony. The last trip was to the quaint town of Yuscaran, the site of an old mine, still being worked on a small scale. The bearded owner gave me several nice samples of ore containing chalcopyrite, galena, sphalerite and silver, and another containing gold, although in minute quantities. Driving in Honduras is a truly hair-raising affair and if one wants to see the country, it is well to have a local driver, as I did.

Practically all travel in Honduras is by air. Pan American and TACA connect Tegucigalpa with New Orleans and points in the neighboring countries to the north and south of Honduras. Within the Republic Sahsa Airlines, flying DC-3's and C-46's, provides almost daily service to outlying towns. Threading a way through clouds and mountains seems to the uninitiated a perilous business but the pilots are superb flyers and know every inch of the country. Two of them are a "must" for visiting rockhounds to meet. Capt. Bill Lady is a self-taught but competent geologist and jointly with Capt. Kivett, operations manager of Sahsa, is developing a mining claim south of Teguc. The real rockhound, however,

is Capt. King Freeland, who has a large collection at his home on the outskirts of Teguc and, I think, adds to it every time he lands his plane on one of the rocky runways which do for airports in most of the small towns.

Strangely enough, the fringes of the large airport at Tegucigalpa turned out to be a fruitful collecting ground for me and yielded some nice specimens of petrified wood and chalcedony.

Another flyer whom the visiting rockhound should meet is Bill Knoy, who flies a charter service plane. Known as "Bigotes" (whiskers) because of his handlebar moustaches, he, too, is a superb

pilot as well as slightly touched by the rockhound fever. Flying with him is not cheap, but neither is it prohibitive, and Bill knows where to take you!

In writing this article, I've practically talked myself into another trip to that friendly and lovely country. Incidentally, if you are likewise tempted, and succumb, be sure to meet Nick Agurcia. Everyone knows him in Teguc and his friendly advice and help will be invaluable. He can even sell you a Buick or Opel if you need ground transportation, or possibly tell you where to rent a conveyance. In any event, he and his wife are the most charming people imaginable!



TWO CRYSTALS BUT NOT TWINS!

The small specimen on the left is a fine beryl crystal from Bon Ami Quarry, Chatham, N. H.

The happy adorable specimen on the right is little Crystal Lynn Barker, daughter of Lt. and Mrs. Robert R. Barker, Otis Air Force Base, Mass.

You might be able to buy beryl crystal but little Crystal is NOT for sale.

SEEING THINGS IN ROCKS AND MINERALS? WHY?

By B. M. SHAUB

159 Elm Street, Northampton, Massachusetts

For some people, and I know a few, it appears that their chief enjoyment in rocks and minerals is based largely on what objects they can see in the pieces that appear familiar to them when they look at the various shapes and configurations that these natural objects assume upon crystallizing. This game is so intriguing to some of the members of our mineral and rock fraternity that they specialize in collecting such oddities. They have fun! And their collections are the source of entertainment for their friends and most visitors. However, I would say that there are others, chiefly those who can see only the cause and hence are not amused by the result, except when it is an occasion of being very polite. It is not uncommon for people to bring some rock or mineral specimen to me because the finders see some familiar outline in the piece and they feel that it is some sort of petrification. Serious mineralogists usually see the cause rather than the result. To concentrate on the effect only does not help one in his study of minerals. Some of the outlines require a vivid imagination to discern anything that looks like something. At times, however, the outlines have a striking resemblance to familiar objects and sometimes, but rarely, to renowned and famous individuals if one is willing to stretch his imagination considerably and neglect many details. But often the imagination must be decidedly plastic to accommodate the supposed scene as others see it.

Our friends who slice agates must have a jolly time searching slice after slice for the outline of some creature (not creation) or familiar object, moss, trees, landscapes, dogs, cats, Abraham Lincoln, George Washington, an angel and many others. To the agate slicer, the closer the resemblance is to a well known object or individual, the higher the value of the piece and some have a high price tag except for tax purposes. Those with some religious sentiment would, for many in-

dividuals, top the price lists.

If one were to analyze the elements which constitute the outlines of a dog or bird, or numerous other objects, as having straight or curved lines, patches of color, fuzzy lines, etc. and their relations one to another; and then study the structure and makeup of the confused agate-like structure of the chalcedonic nodules, he might, if he were very clever and brilliant, formulate these elements and feed them into an electronic computer and receive an answer as to how often he could expect to find a portrait of his neighbor's dog, his best girl friend or some old delapidated set of farm buildings. However if the cut though the nodule were accidentally made along a different plane from the prescribed one he might see the devil staring him in the face. As yet I have not heard of any agate slicing enthusiast finding an image of a thousand dollar bill deep in the recesses of his latest agate find. Like all other elements entering into the picture agates or other stones the location of the cutting plane is only coincidental, only by chance that a plane cuts the formation so as to yield the outline of some object. There is nothing wierd, mysterious or supernatural involved. As yet I have not heard of any one using a forked witch hazel twig that grew over an agate bed as an infalable means of locating the best plane for sawing a specimen to yield the highest priced slabs. I am not sure but that some choice pieces may have been worn by some of our worthy brethren as amulets of talismans, supposedly omens of evil or good. To the writer it is just by chance that a set of elements is so arranged as to yield a familiar outline behind a cutting plane.

Let's look at the cover photograph and Fig. 1. My friends tell me that the smoky quartz crystals look like a dog, others say it must be a mouse while others let it pass as an animal with a stubby crooked tail and an ear like a bat and resting



Fig. 1. The illustration shows the reverse side of the smoky quartz crystal shown on the cover. The mineral originated in the A. C. Perham quarry near West Paris, Maine.

on its belly with folded legs. Still others say it is some sort of a rodent or if it did not have such a long tail it could be a fawn. Another friend said that it looks like some prehistoric monster, and yet another remarked that if it were turned in a certain way it "looks like my beagle". What a beagle! O.K., but why such uncertainty. The answer is that it only very remotely looks like something. The details and many important elements are missing and they are important. The facts are that it, like most similar objects, only very remotely looks like something, a mere suggestion of a well known, object.

The specimen is only an irregular crystal or crystals of smoky quartz about three and a half inches long. From Fig. 1, we at once see that the ear is a small quartz crystal inclined to the principal part of the crystal. On one side it shows the common faces of quartz crystals. On the other side the faces are not so distinct owing to considerable distortion. The straight part of the tail is the usual small

prismatic quartz crystal which supports a larger doubly terminated upper crystal which combination forms a quartz sceptre. The deep notch in the side of the principal crystal represents terminal faces of the sceptre part and also, in part, the one end of a doubly terminated crystal. The principal rough hexagonal outline is the body of the principal crystal. Like many smoky quartz crystals there are numerous like faces in near parallel positions with each other. The interior is irregularly fractured and contains many other irregularities. It is a fine and very interesting piece for a collection, one must admit. Such aggregates are rare.

The crystal is in the private collection of Mrs. Stanley I. Perham at Trap Corner, West Paris, Maine. She considers it a choice oddity. Such accessions add a great deal of interest to mineral collecting and to one's collection. But do not take them too seriously or read too much into their origin. It is much better to learn the real nature of minerals.

MINERAL, GEM AND ROCK SHOW

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History and Mining Unite in "Kentucky Lapis Lazuli"

By MISS MARALEA ARNETT

R.R. 1, Box 253, Corydon, Kentucky

Last summer when I returned from Europe filled with the rapturous remarks of guides and souvenir dealers about the beauty and rarity of lapis lazuli, I was amazed to find some small rocks in my brother's collection of that same shade of blue. I immediately called them "Kentucky lapis lazuli", and wanted to collect more.

On a rock-collecting tour in western Kentucky we found that it comes in many shades from light blue to black, with some beautiful banded specimens. It is hard enough to polish and resembles the so-called obsidian found in some rock shops. Actually it is a slag from early iron furnaces found in the "Between the Rivers" section of Kentucky and having a fascinating history (both past and future) of its own.

A century ago there were ten iron furnaces in full working order, two rolling mills, and three forges, in this section between the Cumberland and Tennessee Rivers in western Kentucky and Tennessee. The iron ore would be considered low grade today, but the farmers asked very little for picking up boulders in their fields and delivering them by wagon to the furnaces. Virgin forests provided charcoal for fuel and negroes could be hired cheaply from neighboring plantations to shovel the earthy silicious matter that provided most of the ore, and to tend the furnaces. At least one iron man, William Kelly, abhorred slavery and probably saw the war clouds gathering. Whatever his reasons, he tried an experiment by importing ten Chinese, said to be the first Chinese laborers introduced in the United States. The severe climate killed them rapidly.

Another experiment of Kelly's proved quite successful—for another man! In 1847 people began to talk about "Crazy Kelly" who had the silly idea that cold air is fuel and could be used to burn carbon from iron. They did not know that no-

madic tribes on the Sinai Peninsula, hundreds of years before Christ, had discovered the same principle applied to copper; so they confined Kelly until a doctor declared him sane. About four years later Kelly was ready to demonstrate. Air was applied to molten iron which was then handed to a blacksmith who proceeded to hammer it into a horseshoe, and then made the nails to hold it.

The people were so pop-eyed over what happened to their pig iron they forgot to watch two English employees of the furnace. Quietly they skipped the country. No one knew why until 1856 when a patent was granted an Englishman, Henry Bessemer, for a "new" cold-air process for making iron into malleable metal. It wasn't new to William Kelly, but when he applied for an American patent he found Bessemer was ahead here too. However, Kelly proved priority since his drawings and experiments began in 1847, and was granted a patent in 1857.

A long legal battle involving millions of dollars began and the man who started it all was so poverty-stricken at one point that he sold his rights for one thousand dollars. (Later, relatives restored it to him.) During the War Between the States the first steel of the Kelly Pneumatic Process was made at Wyandotte, Michigan. Now big business interests jumped into the fray and brought about a "compromise" by which Bessemer received 70% of the American royalties and Kelly 30%. Another Kentucky iron man, Tenny Hillman, was blessed with better foresight and took the Kelly process to Birmingham, Alabama; built furnaces and helped make it into a city of steel. Gradually the furnace fires in Kentucky were banked until the last one closed in 1912. In the meantime, Kelly had died in 1888, having lived to see the United States' steel production grow

from a measly 6000 tons annually in 1847, to one million tons in 1879.

With this background knowledge, we crossed the Cumberland River ferry at Eddyville, Kentucky, one Saturday in September, and drove into the Kentucky Woodlands National Wildlife Refuge bordering our famous man-made Kentucky Lake. With complete detailed directions, we were unable to find any chimney at Mammoth Furnace, but we did find a trail of brilliant blue chunks which led us into the underbrush. Digging under the woodland loam we unearthed several larger lumps of the slag. Then driving toward old Center Furnace we stopped to watch a huge flock of geese feeding peacefully and later our car raced a groundhog along the "Silver Trail" where the wagons used to haul silver from the river to pay iron workers. At Center we found the furnace, but less slag. Near it we read the legends on the

tombstones of the Chinese laborers and visited Hematite Lake.

On down the road we stopped at Sunset Inn in Golden Pond to drink a coke and admire Lew Wallace's rock chimney made of native sandstone, hematite, fossils, conglomerate, and blue slag. We doubt if that exact combination is found anywhere else. While there, we tried to imagine standing on a peninsula surrounded by water. In a few years Golden Pond will be that. The steel William Kelly invented has built one huge dam to form Kentucky Lake. Now Barkley Dam on the Cumberland is under construction. When completed, most of the old iron empire will be under water. Even my "lapis lazuli" will be gone. In the meantime I like to look at the shade of blue so highly prized by old masters and wonder if William Kelly had never made his invention if we would have skyscrapers and steel strikes today.

JADE FOUND IN UTAH

By LEO SIEGEL

Utah Jade, Inc., 1576 S. Wasatch Dr., Salt Lake City 8, Utah

Under separate cover we are sending you two samples of nephrite.

So far as we can determine, this is the first such find in the State of Utah.

The material has been classified by the U. S. Bureau of Mines after a spectroscopic test. It has also been classified by the Gemological Institute of America after polariscope, refractometer and specific gravity tests. Each test indicated nephrite.

The deposit occurs in place in lenses in the ledge rock.

The occurrence is in Millard County, Utah.

The nephrite was located by Val Darger of Salt Lake City and De Loy Jacobson of Elsinore, Utah. These men were examining some tremolite (very large deposit) when they found the nephrite.

There is one lens in place which we have been trying to remove without breaking it up. It may be of record size. So far

visible is estimated at over ten tons. In trying to dig in underneath it, we were stymied by a large deposit of green talc. We don't know of what value it will be if it goes over 20 tons (which we understand is the record) but we still want it in one piece.

Colors so far recovered are white, bluish-gray, and gray. We have also run into a portion containing about 70% white rock as white as white paper.

We have had some cabs cut out of the gray-white and blue-gray material and the polish is finer than on any jade I have seen in my thirty years in the jewelry business. If we run into green, we should have a world beater.

Two samples of the nephrite jade were received, one gray and the other bluish-gray. Both are good quality gem material and they add another fascinating mineral to the many that have made Utah mineralogically famous.

"ROCK CAPITAL OF THE NATION"

ROCK HUNTERS PARADISE

The Dubois area, (Dubois, Wyo.), without question, is one of the largest and least explored areas in the nation. Local "Rockhounds" with their fine collection of gem quality and mineral bearing rocks are excellent proof of this fact. There are literally "dozens" of areas, some of which are as follows:

THE DINWOODY GLACIER AREA southeast of Dubois which contains a great many of the "rare earth" minerals so vital to our national defense and countless other gem and mineral rocks.

THE WIGGINS FORK-FRONTIER CREEK AREA north of Dubois which has just recently become accessible to the average person and contains the most beautiful opalized and agatized wood in the nation with some trees four to six feet in diameter, standing vertically in a wall of rock and up to forty feet in height. Also all types of cast material, pine and fir cone replacements, amethyst lined tree and limb casts and all types of agate equal or superior to any found anywhere in the nation.

THE DUNOIR AREA northeast of Dubois produces, jasper, moss and plume agate, calcite, chrysoprase to name only a few.

THE HUGE UNION PASS AREA south and west of Dubois contains practically all of the mineral bearing rocks, petrified palm wood and unknown quantities of gem quality rocks and is readily accessible.

This is only four of the many vast areas surrounding Dubois. The area as a whole is to a great extent un-explored for mineral and gem quality rocks.

In the southeast corner of Wyoming and in our neighboring states which are considered great rock and mineral producing states the landscape, whether it be on the plains or the highest mountains are literally pock-marked with old pros-

pector's claims holes. This is not true in the Dubois areas and this part of Wyoming is nationally recognized as the least prospected and least developed area in the nation.

The Dubois area with its tremendous cliffs, tall mountains, beautiful valleys and hundreds of springs and streams, is without doubt the most beautiful spot in the nation to prospect and search for rocks. Great areas of this country have never seen the woodsman's axe or heard the sound of the automobile or tractor. As stated by a lady guest who had set very quietly for almost an hour listening to the wilderness and viewing one of our beautiful isolated valleys, "I never knew, I would have never believed it could be like this."

Dubois summers are delightfully cool and refreshing. Dubois winters are milder than any area in the northern two-thirds of the nation. Why? We do not know but we do know that the Indians knew and recognized the fact long before the white man.

We invite you to Dubois to pursue your hobby of rock hunting winter or summer. Our local "rockhounds" will delight in showing their collections and in advising you where and what to hunt.

Due to the above facts, the Dubois Chamber of Commerce at their last regular meeting held January 3, 1961 unanimously voted to adopt a resolution declaring Dubois "THE ROCK CAPITAL" of the nation, and to defend the claim of the Town of Dubois to this title against any and all who shall seek to disclaim our right to this distinction.
DUBOIS CHAMBER OF COMMERCE
Dubois, Wyoming

Editor's Note: Dubois is in the western part of Wyoming, in N/W Fremont County, on U.S. 287.

"KONA DOLOMITE—THE CINDERELLA MINERAL OF THE MIDWEST"

By BOB MARKERT

107 W. Ridge, Ishpeming, Mich.

The "Cinderella Mineral" as referred to by John Mihelcic in his article in "THE OREGON ROCKHOUND" via "THE CONGLOMERATE" volume 21, number 3, dated May 1960, has fully come into its own as one of the hottest "finds" in the Midwest if not in the United States.

In answer to this quote by a leading Editor: "In the Midwest where there just are no gemstone collecting areas to write about", I would like to point out that although the average hardness of Kona dolomite is in the neighborhood of 4 to 4½, and because of this hardness it does not rate as a gemstone, this item is liked and worked by lapidaries all over the country. The stone is easily cut, worked, shaped, sanded, and polished into very colorful cabochons and free forms for necklaces, pendants, bolo ties, and miscellaneous items, that are not subject to a lot of abrasive action.

I have seen bookends made out of Kona dolomite that will match the beauty of any other material on the market. I have seen and own a sphere made of Kona dolomite and it too will match the prettiest of all minerals.

I have seen a profusion of scenic splendor in many of the slabs that I have cut. Animated and human figures appear as well as panoramic mountain scenes. Cut perpendicular to the scenes or strata a beautiful display of color may be obtained.

The Kona dolomite has the basic color of pink to red with beautiful patterns of brown, peach, and black interlacing most specimens. This material is not all dolomite, but for the most part an admixture of the same and silicas.

I would like to quote from "THE GEOLOGY OF THE LAKE SUPERIOR REGION" in a 1911 report by THE U.S. Geological Survey by C. R. Hise and C. K. Leith:

In part it reads: "LITHOLOGY—The Kona formation is dominantly dolomite, but interstratified with this are layers of slate, graywacks, and quartzite with all gradations between the mechanical sediments and the pure dolomites. Thus there are finely crystalline dolomite, cherty dolomite, quartzose dolomite, argillaceous dolomite, dolomitic quartzites, dolomitic salts, dolomitic cherty quartzites, and dolomitic chert. The dolomitic beds range in thickness from a few inches to many feet, but even the most dolomitic beds contain this cherty layers, mingled with which in some places is clastic material. In color the rocks vary from pink and red to dark brown. Because of the impurities of the dolomite the weathered surface has very characteristically a jagged appearance, due to the solution of the dolomite and the consequent protrusion of siliceous phases.

METAMORPHISM — The dolomite has usually yielded to the folding without prominent fractures or cleavage, but it has suffered a minute shattering and is cemented by finely crystalline quartz or crystalline dolomite or the two combined. The slate layers usually have a slaty cleavage and many of the graywacks, quartz, and chert quartz layers are brecciated. These breccias where schistosed are difficult to distinguish from conglomerates. The completeness of this shattering and brecciation was appreciated only by a study of the thin sections, where every one of the numerous slides shows the phenomena mentioned to a greater or less extent. Not a half-inch cube has escaped."

The 1960, 20th Annual Convention of the Midwest Federation of Mineralogical and Geological Societies included this quarry located on Marquette County Rd. 480, 7 miles east of Negaunee, Mich., on its field trip itinerary and 14 different field trip groups totaling more than 750



Some polished specimens of Kona dolomite.

Photo by Mary Deroche

persons moved into the quarry to collect for 2 hours each on 4 continuous days. Literally tons of this material found its way into lapidary shops all over the Midwest. Many people who did not participate in the convention trips and had seen Kona dolomite in the hands of collector friends, visited the quarry for first hand collecting of the material.

As is the case in most quarry operations, little or no regard is shown the quarry operator. After several near accidents and some unscrupulous collecting by individuals and dealers, and because of insurance rates and laws, it was necessary for Lindberg Brothers to close the quarry to collecting.

Your writer became alarmed over the possibility of removing this material from

the lapidary market, so a friend, Clyde Steele, and myself have formed a company, whose primary purpose will be to assure the dealers and rock shops all over the country with a constant and regulated supply of Kona dolomite. Collectors may also obtain this material through trades with members of the Ishpeming Rock & Mineral Club.

Before closing I must say that no action by any person during the convention here in Ishpeming closed the quarry. It was the unscrupulous actions of some post convention collector or collectors. I have heard of nothing but praise for the behavior of the persons participating in the Convention. As for gemstones—I hope that you agree with me—Kona dolomite is truly befitting a place in Lapidary circles.

A FIND OF RARE PSEUDO-CUBIC QUARTZ CRYSTALS IN MAINE

By FRANK C. PERHAM, Geologist

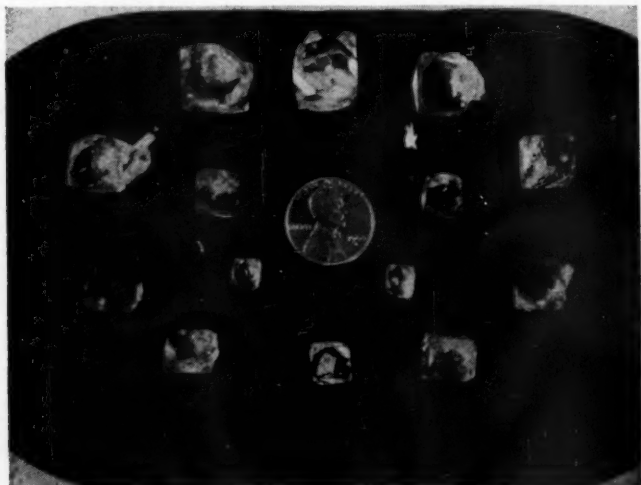
West Paris, Maine

This find of quartz oddities was made at the Tamminen Mine, Greenwood, Maine, in the heart of Oxford County. The owner, Mr. Nestor Tamminen, and the author had suspected the location of these crystals but due to drainage conditions the area was difficult to work in. Some work for feldspar in the pit during the summer of 1960 changed the water level and made the area workable.

This mine has long been recognized by collectors who come to Maine as one of the choice locations for rare and unusual minerals. The mine is located within a highly mineralized, lithia-rich pegmatite containing about fifteen separate mineral families and over forty varieties. The mineralizing solutions followed the hangingwall contacts of the pegmatite and the greater percent of the exotic minerals are found within twenty feet of the contact. The secondary mineralization was terminated with the permeating

of the pegmatite by silica solutions causing pockets and vugs to form at random. Literally hundreds of pockets have been discovered in the course of mining but rarely does any one pocket have many good quartz crystals. These crystals are unique in that rarely do you find a "common" crystal with single termination and long prisms. The crystals tend to be doubly terminated with short prisms or to form in parallel groupings along the face of a larger crystal. Some very fine peduncled crystals have also been found in various pockets. One fact in the collectors favor is that in this location most of the pockets were filled with a wet, sticky clay and during mining more crystals went over the dumps than were ever recovered.

The pseudo-cubic quartz crystals are not actually cubic as the angle is not a right angle but 85 degrees 45 minutes. When the crystals are oriented properly



A grouping of pseudo-cubic quartz crystals showing comparative sizes

it is easy to see all the faces and the side prisms even though they are very small with respect to the enlarged faces. Until one gets the proper orientation though, it is difficult to see anything but a generally cubic block.

The actual removal of the pocket area had to be undertaken with great care because until we actually reached an opening it was difficult to tell if one was there. The area of the crystals finally turned out to be a little over four feet long with about twelve crystal-bearing pockets along the length of it. The mineralized area was bounded on one side by a huge block of feldspar with most of the pockets being contained in etched portions of the feldspar. The other side was solid massive quartz. For most of the four foot length the pocket zone was lined with a light blue cleavelandite and we knew that if there were crystals, they would be in this cleavelandite zone. To remove the rock we drilled short holes about two feet from the cleavelandite and blasted lightly. With a pinch bar we pried out the rock hoping for a cavity of quartz crystals.

The first pocket showed as just a ball of mud. When we worked this mud through our fingers, we felt the crystals within. This was it! From then on wild horses couldn't have pried us from the hole as we picked out masses of brown mud and worked them through our fingers to extract the treasures. The first crystals we extracted were only doubly terminated and in the usual light transparent smoky color. Most of these crystals were one-quarter to one-half inch long which is the average size for individual crystals in this pit. After we had progressed always some of the crystals began to be cubic in general form and finally we hit one chamber filled with mud that must have yielded close to two hundred crystals in various stages of cubic nature. We finally cleaned out the pocket area at dusk and proceeded to Mr. Tamminen's home where we cleaned our find. Out of 350-400 crystals we had about 100 cubic and of these about twenty-five were nice ones

with one beauty measuring one and five-eighths inches on one side. Even those crystals which were not cubic were unusual in that many contained liquid inclusions with movable bubbles. I, for one, slept with visions of quartz crystals that night.

Mr. and Mrs. Tamminen have a very nice mineral collection of quartz crystals in odd forms and also of the other pegmatite minerals found in their mine and the general vicinity. They like to meet other "rockhounds" and swap minerals, and if you should be lucky enough to hit the right day you might even be able to get one of the cubics for your collection without the "work" of digging in the mine dumps for it.

The End.

WOODRUFF TROPHY TO BE RETIRED AT MIAMI

This award was the first to be made available to the American Federation for the best display of minerals in National competition through the courtesy of and devotion to the hobby, of the donor, Harry L. Woodruff of Washington, D. C.

Mr. Woodruff, a Past-President of both the Eastern and American Federations, together with the donors of other National awards, graciously withdrew this trophy in favor of the straight National Awards of the American Federation of Mineralogical Societies, in accordance with a decision made at the AFMS Convention at Eureka last year.

The Woodruff Trophy was of the "perpetual" type and of outstanding beauty and value but never became the property of the winners who received acknowledging plaques.

In discussion with the present President of AFMS, Mr. Woodruff agreed that permanent possession of the Woodruff Trophy be awarded to the winner in competition at the 1961 show in Miami, Fla., with eligibility limited to the six previous winners and this decision will be carried out.

If all 6 past winners enter this competition, and it is hoped that they will, it should result in one of the finest displays of mineral collections ever gathered together at any show.

Henry B. Graves
Publicity Chairman

DES MOINES

'62

YOUNGITE, A NEW GEM MATERIAL FROM WYOMING

ROBERT L. ANSTEY, II

11 Brookdale Road, Natick, Mass.

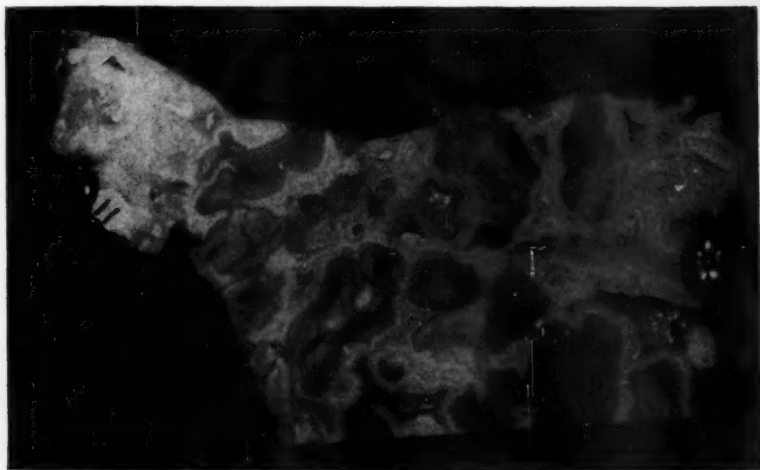
Among the most unusual of the silica minerals is "youngite". It is actually a rock—a very colorful form of quartzite, which is metamorphosed sandstone. In "youngite" the sand grains are completely grown together and cemented by silica, forming a very compact mass. Rough specimens even appear to have a granular texture. However, "youngite", being so compact, may be classified as solid silica or quartz. It preserves the crystalline structure of quartz, while agate, jasper and chalcedony do not. Nevertheless, in respect to hardness and specific gravity, "youngite" is the same as agate.

Its color varies due to the infiltration of iron minerals such as hematite and limonite. It may be dark red, light blue or dark yellow. However, most rough specimens are a brick-red color. Sawed slabs frequently show a delicate lace-like pattern of pink and white with agate-type fortifications around small vugs of drusy quartz crystals. Such crystals are the most characteristic feature of "youngite". Most "youngite" has a light green fluorescence under short wave ultra-violet radiation, due to the presence of activating uranium salts. Some specimens also

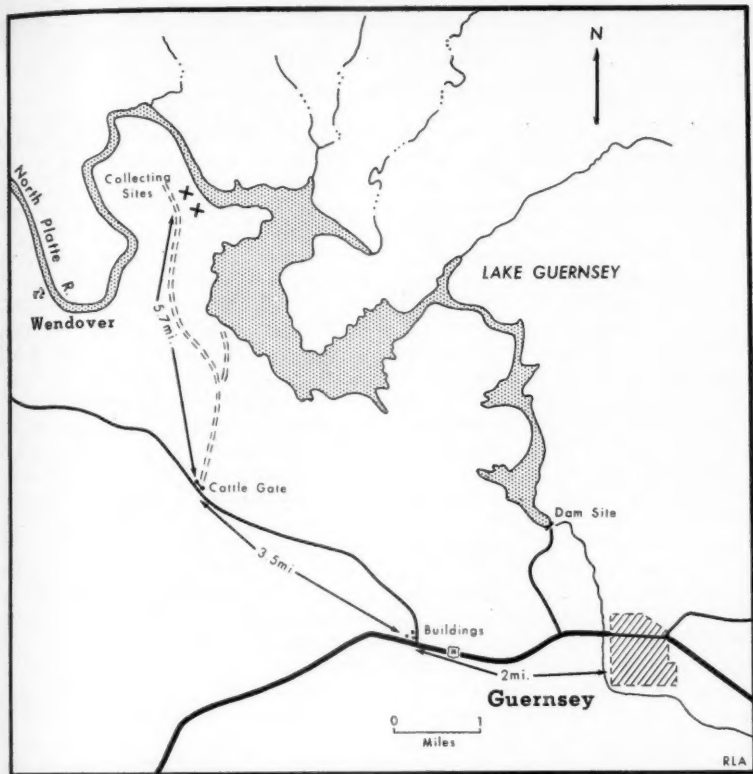
phosphoresce strongly. However there is little or no long wave fluorescence. "Youngite" is easily ground and polished. Some collectors claim that polished specimens have a beauty superior to that of many agates.

"Youngite" has been found only in eastern Wyoming. The name, which is purely local, came from a local rancher, Mr. R. H. Young, who first discovered it several years ago. It is found along the northwestern shores of Lake Guernsey, approximately eleven miles northwest of Guernsey, near Wendover, Wyoming. (see field guide map). The "youngite" is found in caves near the shores of the lake. The rock strata belong to the Opache formation of the Pennsylvanian period.

Good agate, jasper, calcite, quartz, aragonite, hematite, goethite and limonite are found throughout the area. Fossil marine shells of Pennsylvanian age are found in abundance in road cuts along Highway 26. Rock collectors will want to use the facilities of the Lake Guernsey Recreational Area. Permission is not required for non-commercial collecting.



Youngite slab, Wendover, Wyo. Robert L. Anstey Collection. Specimen is 5x2½ inches.



Map showing collecting sites for youngite near Wendover (Platte Co.), Wyoming.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, AND MARCH 3, 1933, OF ROCKS AND MINERALS, published BI-MONTHLY, at PEEKSKILL, N. Y., OCTOBER 1st, 1960.

1. The name and address of the publisher, editor, and managing editor, and business manager is PETER ZODAC, PEEKSKILL, N. Y.

2. That the owner is PETER ZODAC, PEEKSKILL, N. Y..

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: NONE.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholders or security holders appear upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affidavit's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than of a bona fide owner and this affidavit has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. The average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the 12 months preceding the date shown above was: (This information is required by the act of June 11, 1960 to be included in all statements regardless of frequency of issue)—7513

PETER ZODAC

Sworn to and subscribed before me this 13th day of March, 1961. My Commission expires March 31, 1961.

ANNE M. SCHLICH

GEOLATELY

DONALD A. ARMISTEAD

47 Norris Street, Hamden 17, Connecticut

A chunk of dull, gray dolomite rock, a lump of powdery, white chalk, a piece of rough, black cinder—. These specimens and others are the result of several years of collecting and the beginning of many more years of interesting and intriguing rockhounding.

This special collection is not limited to crystals, to gems, to chemical types of minerals, to localities or to any of the usual specializations of our hobby. In fact, it may include a specimen of any type from any place on the Earth. And yet the collection does have a limitation, a set of rules.

This limitation is imposed, strangely enough, by another very popular but entirely unrelated hobby. To many people the collection and study of postage stamps and other philatelic material is also a very interesting and educational hobby. Many of these philatelists become specialists for one reason or another. In so doing they collect, or specialize in, one "topic" of postage stamp to the extent that topical collections are among the most popular from novices to experts. Topics are, of course, many and varied for the art of stamp-making has, in a little over a century, borrowed almost countless persons, places and things as decorations.

Undoubtedly, these specialists have reasons for collecting topicals picturing such things as maps, flags, bridges, butterflies or animals just as one might build a topical collection featuring the theme of geology. Such a culmination might well be satisfying to the philatelist but, to the geologist, this is the point at which the fun is just beginning. For when one attempts to acquire geological specimens which have never been in any dealer's stock bins or which may never have been considered as actual specimen material, then one finds rock-collecting very interesting. These specimens are, of course, suggested by the objects pictured on certain stamps. Thus, the birth of a hybrid hobby—*Geolately*—the collection of

geological specimens depicted on philatelic items.

The dull, gray dolomite rock specimen was once a piece of the actual cap rock of Niagara Falls. The chalk was a part of the white cliffs of Dover, England, and the black cinder was spewed out of the earth to become part of the Mexican volcano, Paricutin. There are others—banded phosphate rock from a small island in the Pacific, asbestos from Swaziland, petroleum from Pennsylvania, Canada and other places. Gold, silver, platinum and emeralds are neighbors to bits of the Rock of Gibraltar and Diamond Head, Hawaii. Crystals of fluorite and quartz, fossils, rivers, bays, mountains and geysers have been featured on stamps; and there are many others. But, this is only of the past and the present. Undoubtedly, philately will borrow other geological items in the years and issues yet to come.

This facet of rock-collecting is both interesting and intriguing. It is also difficult and even frustrating at times. However, as compensation for not being able to indulge personally in worldwide collecting, one meets through correspondence many fine people. Some are fellow rockhounds, some are mine or quarry managers and some are retail merchants or museum officials. It is even necessary at times to correspond in languages other than English. Nevertheless, all of these things condense into enjoyment and satisfaction.

As with all collections, a mode of display must be chosen from numerous possibilities. The method herein illustrated has been very satisfactory for both public and private display. However, housing an extensive collection in this way could become quite a problem. A stamp and the rock or mineral specimen from the object or locality pictured on the stamp are displayed together as a unit. To do this, a piece of white plastic foam is cut to fill a clear plastic box about

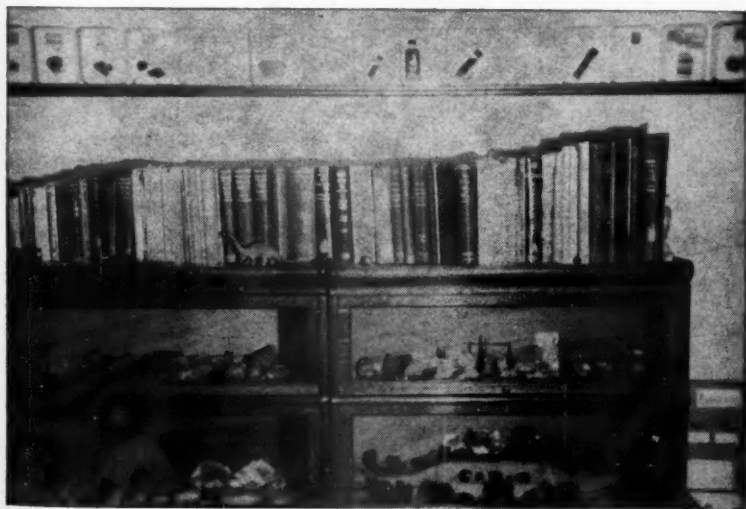
four by five inches. The stamp is mounted on a piece of black art paper to produce a narrow black frame around the stamp. After the stamp is mounted near the top of the plastic foam, the specimen is pressed or carved into the lower part. Occasionally, a set of two or three stamps relating to different phases of the same specimen or a glass vial containing petroleum or placer sand will require a slight modification of the above arrangement. Descriptions of the stamp and the specimen are visible through the back side of the plastic box because it is more interesting to relate such information along with unusual facts or incidents. However, when displayed in public, visible, descriptive labels are necessary. Such labels include the Scott number and a short description of the geological picture on the stamp, also a description and locality of the specimen. Other information could be added but might be superfluous or even detracting.

One might wish to arrange a group of geologically topical stamps as a display which would supplement the true *geolatic* collection. Such stamps would be those that pictured a geological feature considered neither collectible nor

feasible. Examples of these might be Plymouth Rock and the Great Lakes. Certainly, a national shrine should be respected and as for the Great Lakes, a specimen of water is not quite the type of specimen to represent the extensive geology of the Great Lakes region. Therefore, these geological topicals could be displayed without actual specimens but with a direct relationship to geology.

Geolately, then, in the broadest sense, would be the collecting and study of philatelic items dealing with any branch of the geological sciences, and of geological specimens of or from objects or localities represented on the philatelic items. The building of a *geolatic* collection requires at least some basic knowledge of two popular but very different types of hobbies. One must "dig" for information and specimen sources thereby increasing ones fund of knowledge. Acquaintances increase and so may friendships. Satisfaction is large and actual cost is small. The challenge of the unknown and of the elusive will divert one's mind from the daily hustle of life.

D.A.A.
2-18-61



Part of the author's *geolatic* collection.



WORLD NEWS ON Mineral Occurrences

ITEMS ON NEW FINDS ARE DESIRED
PLEASE SEND THEM IN.

Abbreviations: xl—crystal
fl—fluoresces

xled—crystallized
ph—phosphorescence

xline—crystalline

ALABAMA—Nice loose silvery muscovite xl, 6x4 inches in size, is on display in the offices of James Miller Davis (architect), 211-212 Guaranty Savings Bldg., Montgomery, Ala. The specimen comes from Micaville (Clebune Co.), Ala., a little village whose main industry is mining scrap mica.

ALASKA—"I see that you like some rocks from Alaska for your World News on Mineral Occurrences, and Alaska rocks I have plenty of. I would like to see your column always filled with Alaskan data, as Alaska is my pet subject—I have lived here some 20 years and think it's the best state in the Union.

"I am sending a green rock with spots of blood red. It takes a good polish and was found on Caribou Creek, mile 105, Glenn Highway, 60 miles from Palmer. Could this be bloodstone?"—item dated Jan. 22, 1961, from Mary E. King, Box 1347, Palmer, Alaska.

The 2x3 inch dark green slice with red spots is a nice piece of bloodstone (quartz). Bloodstone is green quartz (plasma) dotted or spotted with red quartz (jasper). It should take a nice polish.

ARIZONA—"I still take and enjoy R&M. In fact it is the only rock magazine I take any more. Used to take several others but finally dropped them. Guess that shows which one I like best. Also R&M is the only one to even acknowledge any small item I have sent in. After my first item you published I received a number of offers of trades for specimens, which was unexpected but pleasant.

I made quite a number of trades and acquired some very nice eastern minerals. "Am sending you a sample of two quartz xls coated with siderite and calcite xls. Small but nice I think. About a year ago a pocket of these were opened in the mine at Washington Camp. Patagonia (Santa Cruz Co.), Arizona. Some ran to a foot in length and up to 5 inches wide. Seems as though three dealers got most, if not all, of them. One is a good friend of mine so I have several specimens. Recently another pocket of these was broken into."—recent letter from Ralph A. Clutter, 133 E. Penn Ave., Escondido, Calif.

What beautiful specimens! One was a slender, 3 inch dark smoky quartz xl encrusted with lustrous, brown drusy siderite xls. The other was a 2½ inch smoky quartz xl, two faces of which were coated by dark gray drusy calcite xls.

ARKANSAS—"In the summer of 1958 we dug a well here on our property. My husband dug it out and I hauled the material up by the bucketful. At 20 feet down I brought up a large rock and two smaller pieces about a pound each. The big one weighed about 25 pounds. The enclosed slab is a piece of it. What do you think?"—item sent in by Mrs. John Roder, Rt. 7, Box 68, Hot Springs (Garland Co.), Ark.

The 1½x1½ dark brown banded slab (one face polished) is a beautiful piece of agatized wood. Ain't nature wonderful! You dig a well and you may get water, or oil, or gas, or even petrified wood (agatized was the type found by Mrs. Roder).

CALIFORNIA—"On a recent visit to Los Angeles, Calif., I stopped for two days in Yuma, Ariz., and had my first chance at the minerals in the Colorado Desert of California and Arizona. By a lucky chance I encountered Mr. Alton Duke, a gem collector and author of 'Arizona Gem Fields'. Near Indian Pass, Imperial County, Calif., and then deep in the Muggins Mountains, he and I got some fine sky blue kyanite, deep blue dumortierite, palm root, black agate and a little sagenite and plume. One of the nicest things about this rockhounding is the fine people one meets."—recent item from Vertrees Young, P. O. Box 1109, Bogalusa, La.

A specimen of the kyanite found near Indian Pass was sent in by Mr. Young. It is an interesting piece, platy, sky blue color and 2x2 inch in size.

COLORADO—"Stibnite has been found in xled form in at least two Colorado mines.

"In the Silverton Area (San Juan Co.), on King Solomon Mts., it was found in the North Star Mine.

"It was found in the 1700 ft. level of the Portland Mine, Teller Co. (Cripple Creek Dist.).. Colo."—item sent in by Don Ingle, Blue Creek Mineral Enterprises, Blue Creek Road, Evergreen, Colo.

CONNECTICUT—In Pappy's Beryl Shop, Rt. 6A, East Hampton, Conn., we recently saw some stubby 2 inch rock xls that came from a road cut behind the ren Mfg. Co. (Machine Tools) in Newington (Hartford Co.), Conn.

FLORIDA—A most interesting 1½x4 inch pale amber selenite xl with lenticular twin, was sent in by E. J. Marcin, 244 Eadon Lane No., St. Petersburg 10, Fla.

The selenite was found in the dredged material from Boca Ciega Bay in Gulfport, a small town adjoining St. Petersburg (Pinellas Co.), Fla.

GEORGIA—"Some Lost Mineral Localities in Georgia", by A. S. Furcron, is a most interesting article that appeared in the Georgia Mineral Newsletter, Fall 1960, pp. 124-129. The Newsletter is

published quarterly by the Georgia Geological Survey, Agriculture Building, 19 Hunter Street, Atlanta, Ga., for the benefit of Georgia mineral producers, The Georgia Mineral Society, Earth Science groups and others interested in the minerals and geology of the State.

IDAHO—From near Stanley, Blaine Co., Idaho, we have a loose, 1½ inch long, gray orthoclase xl that was sent in by C. K. Henning, Box 482, Shoshone, Idaho.

"Have some very large xls of this feldspar."—note on label.

ILLINOIS—"I am sending two specimens which came from the same rock formation along a hillside 3 miles east of Westville, Illinois. Will you please identify them for me."—from Clark La Mar, RR 1, Georgetown, Ill.

One specimen is a xled, pale brown calcite (small xls) which fl. bright yellow (s.w.) and lemon yellow (l.w.).

The other is a xline brown calcite in brown limestone which fl. lemon yellow (l.w.), no fl. (s.w.).

Westville is in So. Vermilion County of Eastern Illinois.

INDIANA—"From a little stream near Covington, Ind., I am sending you a specimen for identification."—item from Clark La Mar, RR 1, Georgetown, Ill.

The specimen is a whitish chalcedony, stained brown by iron.

Covington is in Western Fountain County in Western Indiana.

IOWA—"We enclose for your consideration two specimens, one polished the other as broken off of a large rock found in a field in Des Moines County, Iowa, by Mr. Art Hueschen of Danville, Iowa.

"This rock is about 275 lbs. by actual weight, is oblong in shape, about 2 feet long and about 9 inches high and 11 inches wide. It has no glaciated marks or grooves. It polishes nicely.

"Mr. Hueschen is a new addition to the Rock Hounds and has found many types of rocks in Des Moines County, Iowa, which we predict will be a Rock

Hound's paradise in the future."—recent item from Ed and Earl Smith, Geode Industries, New London, Iowa.

The specimens are dark green massive augite (pyroxene) one specimen is rough and rounded, the other has 3 faces beautifully polished.

"These rocks were found in a $\frac{1}{2}$ mile area near Danville, Iowa, on my farm."—note from Mr. Hueschen.

KANSAS—"What mineral is the crystals in these broken pieces from the center of a septarian? These were found $\frac{1}{2}$ mile south of Lake Hobbie, Osbourne County, Kansas. Found around Nov. 20, 1960."—item and specimens from Mrs. A. H. Huckaby, Box 126, Selman, Okla.

The specimen is a dark brown columnar calcite which fl. bright brown especially good L.W.

KENTUCKY—"I am sending you a Kentucky rock which if of enough interest you may mention it in R&M.

"It is a flint-like piece covered with powdery white coating. From an Indian village site. Brown's Bottom, Owen Co., Ky. Have never seen any of this material except this place."—from Charles Johnson, 1033 Seminole Trail, Frankfort, Ky.

The specimen is a brownish chert (quartz) with a white limestone crust.

LOUISIANA—Ken Kyte, Box 161, Covington, La., has been finding some very good petrified wood in his State. About 18 miles N/W of Leesville, Vernon Parish, La., on the side of a hill, he found some beautiful pieces of brown to yellow opalized palm wood.

MAINE—"I have a lot of vesuvianite to trade for agate. Will send a pound or more to anyone who sends me a pound of agate. As the vesuvianite is heavy, shipments should be in 5 lbs. at least for best specimens. Really nice ones weigh up to 25 or 30 lbs."—item sent in by C. W. Daggett, Monmouth, Me.

A specimen was received from Mr. Daggett. It is a dark brown xled vesuvianite on dark brown massive vesuvianite and the locality in Sanford, York Co., Me.

MARYLAND—Interesting specimens of stretched black tourmaline xls have been found 2 miles southwest of Delight (Baltimore Co.), Md., at the Yox Quarry (quartzite).

MASSACHUSETTS—"Will you please identify the material in the enclosed specimen that appears as silvery droplets in a reddish granular mass?

"The specimen was found in the contact area of basalt and shale at or near the southwestern end of the long cut where route 202 is being relocated in Holyoke (Hampden Co.), Mass., west of the Holyoke Water Department reservoir.

"I have searched the area several times since then but this is the only specimen of this material.

"Chalcopyrite in small irregular masses and as microcrystals on calcite crystals lining small vugs in altered basalt is common in the area as is calcite in several crystal forms, also cavities containing amethyst of rather poor quality are common.

"A small amount of prehnite and several larger masses of greenish crystalline datolite and some chabazite as nearly cubic crystals lining small cavities were also found, also a very small amount of galena, sphalerite and malachite as well as several other minerals that I have not identified as yet."—item received some few weeks ago from Robert H. Nelson, 949 Granville Rd., Westfield, Mass.

The unknown specimen was a dark red xline hematite in earthy brown limonite (yellow ochre). No silvery mineral could be seen—perhaps the reflection of the tiny hematite xls gave the illusion that the xls were silvery colored.

MICHIGAN—From a gravel pit near Stephenson (Menominee Co.), Mich., we have a bright red jasper pebble that has been collected by Mathew Koch, RR 2, Stephenson, Mich.

MINNESOTA—"I am sending you a beautiful group of low temperature octahedrons of magnetite with small marcasite balls on a matrix of cretaceous conglomerate. The octahedrons are about $\frac{3}{16}$ " in size but are intergrown with each other so that many appear just as

triangle shaped face. The only place I know of where these specimens have been found is the Judson iron mine near Buhl (Saint Louis Co.), Minn. The ore body of the Judson mine is located south of the main iron formation (which is the Biwabik formation of the Animiki group of the Later Pre-Cambrian) and represents ores carried there by moving waters from the north during Cretaceous times.

"Visitors to the Mesabi may be able to track down a miner or collector who has extra specimens of this beautiful material but it will probably take very good trading material or cash to obtain one. The last time I checked, the mine was not working so specimens may become harder to get in the future.

"There is no collecting in the mines without a permit. The mining companies often supply guides and permits to clubs but not to individuals as they don't have enough Safety Officers to act as guides. Perhaps the best bet is to contact a few collectors when you each the Mesabi. Collecting spots that are open to the public change status so rapidly to be worth recording here. The main reason spots are closed is that many visiting collectors don't remember the mining companies by-words SAFETY FIRST."—letter dated Jan. 1, 1961, from Dick Lake, P. O. Box 361, Chisholm, Minn.

A beautiful $2\frac{1}{2} \times 3$ inch specimen was received. It consists of lustrous black magnetite with lustrous bronzy-yellow marcasite.

MISSISSIPPI—Jud Locke, 39-40th St., Gulfport, Miss., has in his collection a 4 x 6 inch brown, banded, petrified wood, beautifully polished. The specimen was found in Hinds County at the headwaters of Moody's Branch (found in ditch) on property of Miss. School for the Deaf, in Jackson, Miss.

MISSOURI — "We thought readers might like the following writeup on some new nickel minerals found recently in the St. Louis area. So, the following:

"Advanced mineralogists will be interested in the following new nickel minerals just discovered in the St. Louis,

Mo. area. There were found in a new roadcut on Highway 66 not far from St. Louis, in St. Louis County.

"Millerite has occurred in this area for a long time, but is getting rather scarce. However the following nickel minerals are entirely new here, or anywhere else as far as the writer knows. The honosite is an entirely new discovery in the United States, first found in Wisconsin. The exact formula for this item has not been finished, but is tentatively a hydrated iron nickel. The first two items are just new formations of known minerals.

"First is pseudoviolarite, black, acicular needles, after millerite. Now and then it occurs mixed with the brassy millerite needles.

"Second is pseudogarnierite in sturdy, acicular, grass-green needles, also after millerite. The matrix with these xls are stained with the garnierite also. Is very attractive mineral.

"Third is pseudohonosite, after millerite. These crystals are yellowish in color.

"All three minerals seem to have been definitely analyzed, and only this finding caused the writer to submit the data for possible publication to you.

"All crystals are found in small chalcedony geode sections, the cavities containing also barite, calcite and doubly-terminated quartz crystals. The geodes run from one to three inches in size, mostly the former size. Quite a number of local rockhounds secured some of these specimens, though they are mighty scarce right now, as the site was quickly overrun with these eager folks. Quite a thrill was caused, of course, with this unusual discovery. The writer luckily secured quite a number of all three items, and is mighty proud of them."—Respectfully submitted by Mr. Geo. C. Dick, 9207 Argyle, Overland, 14, Mo.

MONTANA—"During the summer of 1959 they gravelled several miles of road near here with good quality opal. The opal hill from which the opal came from is located south of St. Philips on a farm to market road which is the one

on which the crushed opal and a lot of petrified wood was used as gravel.

"St. Philips is a small community located about 8 miles S/E of Wibaux (Wibaux Co), Mont."—item sent in by Hjalmer Johnson, Prop. Lost Cabin Trading Post, Wibaux, Mont.

Three specimens of the opal were sent in. They are milk white in color, two show thin bands of dark gray chalcedony—all are attractive.

NEBRASKA—"Here is an item on Nebraska for World News.

"Selenite xls are found along Highway 3 south of Fairbury (Jefferson Co.), Nebr., in reddish clay soil."—sent in by Mrs. Robert Cooke, Callaway, Nebr.

NEVADA — Porcelain-white, fine grained and massive magnesite occurs in Clark County, Nevada, in the valley of Muddy River, a few miles above the town of St. Thomas.

NEW HAMPSHIRE — "During the summer of 1959 I looked over the now idle section of Palermo Beryl Mine, North Groton (Grafton Co.), N. H. Some feldspar rubble with many small vugs lined with cleavelandite crystals, looked interesting. On these crystals were many excellent crystals of autunite. There was a larger vug with nearly colorless, whitish crystals which upon a cursory examination reminded me of bertrandite, a mineral I had long expected at this locality. However, being a phosphate locality of the first order reminded me of this group of minerals and I found a semblance to the phosphoferrite. Mr. Carpenter of Harvard examined the specimen optically and it is bertrandite—just one more species to the long list of unusuals at this locality."—item dated Feb. 19, 1961 from Gunnar Bjareby, 147 Worthington St., Boston 15, Mass.

NEW JERSEY — When lightning strikes a sandy area it often melts the sand, forming long, slender, fragile, glassy tubes which penetrate the sands for many feet. These glassy tubes (smooth on the inside, rough on the outside) are called fulgurites, a name derived from the Latin for thunderbolt.

Fulgurites have been found in the sand in South Amboy (Middlesex Co.), N. J.

NEW MEXICO — Black botryoidal masses of cassiterite have been found in the Taylor Creek district (Catron Co.), N. Mex.

NEW YORK—The finest molybdenite from New York we ever saw, is in the collection of John Kuhhorn, Germantown, N. Y. It is a lustrous, foliated lead-gray mass in 6x6 inch gray, banded gneiss.

About a year ago Mr. Kuhhorn visited a working quarry (gneiss) on Willimantic Ave., Yonkers (Westchester Co.), N. Y. where he found the molybdenite—the only specimen worth taking away.

NORTH CAROLINA — Pink corundum has been mined in Buncombe County, N. C., $\frac{1}{2}$ mile north of the Blue Ridge Parkway at Balsam Gap.

OKLAHOMA — "I have enclosed two small pebbles which I wonder if you would identify for me. We found these near Webb (Dewey Co.), Okla., in a ravine. They seemed to be plentiful in this spot but no where else nearby."—item from Mrs. John A. Evans, Box 186, Taloga, Okla.

The pebbles are green epidote and of a quality that should take a good polish.

OREGON—"In recent years Apache tears have been found near Hat Rock State Park, a few miles above McNary Dam, near McNary (Umatilla Co.), Oregon, on the Oregon side of the Columbia River. Found in a layer of perlite, a glossy black without any layer of coating as those usually found in Arizona. Most of them are from an inch down in diameter. They are a form of obsidian."—item dated March 2, 1961, from G. W. Weber, 1320 Portland Ave., Walla Walla, Wash.

Apache tears are small roughly rounded masses of black obsidian. Mr. Weber sent in 7 specimens of various size—all lustrous black—from the above locality.

PENNSYLVANIA—Melvin E. Wagner, New Freedom, Penn., sent in a number of small dark brown loose cubes of limonite pseudo. pyrite.
"Found near Wrightsville (York Co.), Penna., in an open field."—on label.

RHODE ISLAND—O. A. Johnson, 87 Victory St., Berkeley, R. I., sent in a small specimen of green chlorite on rock which he found in Providence (Providence Co.), R. I.

SOUTH CAROLINA—The Editor of R&M received the following letter from one of our good subscribers, Frank L. Sims, 750 "B" Ave., West Columbia, S. C.

"One Saturday I had previously arranged with Mr. R. C. Fennell of Greeleyville, S. C., to go rock and arrow hunting. He is Superintendent of Education of Williamsburg County.

The morning was cloudy and looked as if it might rain. As usual we went anyway. When we were about 10 miles out of town it started to rain. We headed for the head waters of Lake Murray about 35 miles from here. At times when the lake is low there is some very good rock hunting around the edges between the low water and high water line. Naturally, you guessed it, it rained so much we quit before we started. We had passed a place that morning near the lake where Barbeque is cooked the old time way with oak and hickory coals—open pit type. We decided to buy some for lunch, \$1.00 per pound, hot off the fire, pick your cut. Boy, you should try some back bone pork chops and ribs—like it, you might even consider moving South. Anyway, come on down, I need to hunt arrows up that way again. Rock crystals and pyrite can be found in this area also other minerals I cannot identify. You can even pan a little gold if a little will satisfy you."

The Editor will be down to see you, Mr. Sims, before too many moons go by. Panning gold sounds very exciting. Any mine tunnels near you that we can visit?

SOUTH DAKOTA—"I found the enclosed specimen at Fairburn, Custer Co., S. Dak. It looks to me like quartz with jasper spots but tried to have it identified by a mineral dealer in Custer, S. Dak., but was told that he couldn't tell me what it was because he had never seen any like it before."—item from Joseph Bouvette, P. O. Box 1803, Fall River, Mass.

The specimen is oolitic quartz—quartz consisting of small rounded particles resembling fish roe.

TEXAS—From Falls City (Karnes Co.), Texas, we have an interesting specimen of reddish jasperized wood that was sent in by Luling Rock Shop, P. O. Box 668, Luling, Texas.

VERMONT — From a talc mine at North Windham (Windham Co.), Vt., we have a dark gray chlorite full of small black magnetite xls that was sent in by Mrs. Louise P. Mullen, 24 Chestnut St., Brattleboro, Vt.

VIRGINIA—Dr. Elmer Nelson, P.O. Box 12, Stafford, Va., sent in an interesting specimen which he collected at an old gold mine in Goldvein (Fauquier Co.), Va. It consists of a tarnished bronzy-yellow pyrite vein with black hornblende in pale smoky quartz. Some of the pyrite is in tiny cubes.

"Collected at an old gold mine site at Goldvein (Fauquier Co.), Va. This mine was worked last in the 30's—saw a date of 1934 in concrete around the old well.

"Collected the specimen on the old dump which is being carted off for road fill so it may soon be gone. The old mine shaft has fallen in—did not go very far as undergrowth is all over (also copperheads are in possession—saw one that had been killed).

"The old mine is a short distance from U.S. 17"—note from Dr. Nelson.

WASHINGTON — Chas. C. Smith, Rt. 3, Box 20, Newport, Wash., sent in a specimen which he had collected near Newport (Pend Oreille Co.), Wash.

The specimen consists of greenish plates of chlorite on brownish granite.

WEST VIRGINIA — Robert P. Duke, Hedgesville, W. Va., informs us that an old iron mine (hematite) known as Ore Banks is located at Bakerton (Jefferson Co.), W. Va. The mine was operated during the Civil War.

WISCONSIN—Lyle DeRusha, Rt. 1, Box 382, Chippewa Falls, Wisc., sent in an interesting specimen which he had collected at Wausau (Marathon Co.), Wisc. The specimen consists of small brownish zircons (fl. orange) in a grayish feldspar.

CANADA—"I am sending you a specimen which I found last summer in Hybla (Ontario), Canada. Would you identify it for me?"—recent item from Amos F. Lake, 3962 Newportville Rd., Eddington, Pa.

The massive dark bronzy-yellow mineral is pyrrhotite.

MEXICO — "Recently, I received a package of rough opal consisting of the typical Mexican gem varieties which were mined in the State of Jalisco, one of the most recent commercial opal producers. On examining this lot, I was surprised to find several nodules exhibiting minute pin-point specks of a brilliant, entirely silver-like play of color in a bluish-gray transparent base or body . . . the first opal I had ever seen with silvery reflections. With the aid of low-power magnification, these tiny specks revealed themselves to be multi-colored, having the same appearance as ordinary precious opal. Unfortunately, I do not have any information as to the exact source of this opal, because as I learned later, the opals came from several small mines or prospects in Jalisco, and were mixed together by the buyer after purchasing them from a number of miners. In any event, it is just one more variation of this rainbow gem." — item received from Ralph C. Gosse, Albany, N. Y.

SCOTLAND—From Bon Awe Quarry, on Loch Etive, Argyshire, Scotland, we have an interesting gray granite that was sent in by Sandy Ramsay, 1015 Aiken-

head Road, Kings Park, Glasgow, S. W. Scotland.

Loch Etive, one of the longest fiords to indent the west coast of Scotland, runs inland about 15 miles.

SPAIN—From Spain's most famous silver mines located at Hiendelaencia, Guadalajara Province, in central Spain, we have a most interesting specimen consisting of xled grayish calcite and xled dark brown siderite on brownish quartzite.

TASMANIA—"Small, colorless water-worn crystals of faceting quality topaz have been found in the gravels on Flinders Island, Furneaux Group, Tasmania."—item sent in bp Ralph C. Gosse, Albany, N. Y.

RUTH WENTWORTH

(Obituary Notice)

When the Editor of R&M visited us in 1949, he very kindly introduced us to some of his subscribers among which was Ruth Wentworth, of 135 Maine Ave., Portland, Me.

A beautiful friendship formed between us because both of us enjoyed all phases of nature, and also enjoyed studying if time allowed. She and her husband came here often. Their hobby was color slides and movies and during those awful years from 1952 to 1955 when I could not walk, they brought their projector here and showed slides of their garden and trips and lovely minerals.

But yesterday (March 16, 1961) it was our sad duty to attend Ruth's funeral. She had a shock in July, 1959, and although she was able to walk a little with a cane, she spent most of her time in a wheelchair till last Monday night (March 13th), when another shock killed her.

Mrs. Evelyn Blake,
Kittery Point, Me.

Wants more information on Canada!

Editor R&M:

I want to congratulate you on the continued interest and enjoyment given to us who receive this magazine. I sometimes wish there was more space given to Canadian minerals but realize it is more or less due to the fact you have not the Canadian information.

Mrs. Winifred Ramsey
2720 Heron St.,
Victoria, B. C., Canada

CONCRETIONS: WHAT ARE THEY?

By CLARK M. GARBER

87 N. Main St., Butler, Ohio

The ordinary rock hunter is probably interested only in brightly colored formations that make unusual show pieces or jewelry. But, to the serious mineralogist or geologist this is not the case. To them an unusual rock formation is something that appeals to their analytical mind and arouses in them the desire to know the why, where, how and when such formations came into being. The average concretion or geode is from two to six inches in diameter but once in a great while much larger ones are found.

This brings me to the subject of a very unusual concretion which I have received from a local farmer who dug it up on his farm, near Butler, in Richland County, Ohio. The composition of this farm land is glacial drift and lies not far from the terminal moraine of the great ice sheet which covered this area some fifty thousand years ago. Was this concretion brought here by the glacier or was it formed within the glacial deposit? That is the question for which I am trying to find a logical and satisfactory answer.

The concretion pictured here conforms

to neither the dimensions or contour of the more common concretions or geodes. It has a uniform diameter of seventeen inches and its depth is four and one fourth inches at the center. The flat surface is a plate of limestone composition one-sixteenth of an inch in thickness. The bowl has a wall of the same material but slightly thicker. To determine the content of this concretion a small area of the flat surface plate was removed. This disclosed the interior to be completely filled with pure sulphur formed in a corded mass. A flame was applied to a piece of the sulphur and it was found to burn very readily giving off the characteristic blue flame and acrid fumes.

A search of Ohio Museums discloses not a single specimen of this kind on hand. Of course this gives some credence to the idea of its glacial origin but the possibility of local origin still stands. Perhaps the readers of this article may have some valid opinions concerning the origin or formation of this concretion, in which case, the writer will be happy to receive their views and suggestions.



An angular view of the concretion showing depth and uniform curvature.



Front view of concretion showing corded sulphur content and the symmetrical uniform curvature of the circumference.

NEW MEXICO'S — ORA BLANCHARD MINE

By JIM SMEDLEY

Mineral Museum, Follansbee, West Virginia

On our way to California we planned to visit Mrs. Ora Blanchard's Mine. So, after staying at a motel for the night in Carrizozo, New Mexico, we were up at day-break and on our way to the mine.

It is 33 miles from Carrizozo to the town of Bingham, New Mexico, and about 44 miles from Socorro on Route No. 380 to Bingham, where the mine is located.

Do not drive too fast or you will miss the town as it is only one building—a gas station, postoffice and general store, all in one.

Just east, about one-fourth mile from Bingham, you will see a dirt road that turns south. Cross the cattle guard and follow the electric line poles to Mrs. Blanchard's place.

The road is dirt and in good condition, but watch for any large rocks that may have gotten on the road. I found the only one while I was coming out, and it hit the gas line on the car which caused a leak. After I obtained some string at Bingham and wrapped the line, I then drove 44 miles to a place where I could have the line repaired.

Now back to the road leading to Mrs. Blanchard's home. It is about three miles from the main road to her place. Just as we could see her place, we noticed an animal cross the road. We stopped the car, and my two boys, my girl and I got out to see what it was and take moving pictures of it. We ran after it until we got it cornered under a bush. It turned out to be a large badger. While taking the pictures, we heard a police whistle, which just didn't seem right out there in the desert.

We left the badger and then drove up to meet Mrs. Blanchard who gave us a short lecture about our chasing the animal, as all animals are scarce there.

After having introduced ourselves, we talked about the mine, and the minerals she has around her home. She will sell the minerals she has about to those who

do not wish to go up and hunt their own.

We then paid the one dollar each, her charge to visit the mine, which you will find out will be the best one dollar's worth of rock hunting enjoyment you will find. If not, I would like to hear about it.

We all got into the car, with Mrs. Blanchard holding a box of tools which she takes along and she surely knows how to use them.

Up the mountain, and I mean up, we went 6,000 feet to the top on a road that is ok, but take it slow as it is a long way down and there are no trees or anything to stop you. At the top there is plenty of room to park and turn around.

Once out of the car, you just stand awhile and admire the valley below, which is known as the Valley of Death because the wagon trains found that all the water holes had dried up in the olden days. A note of caution, take plenty of water with you as there is still none there.

Across from where you stand you can see where the first atomic bomb was put off.

Now let's get into the mine, which is only a few steps from where you are standing. With Mrs. Blanchard leading the way, we were soon inside where you don't have to have a light, but a flashlight may be used. You just stand there not knowing where to start as everywhere you look there are crystals. There are about fifty minerals found there, and a new one which Mrs. Blanchard did not know about until I wrote her—a ruby that I lost out of my ring.

Now before doing anything, I want to give you some advice, so you won't learn the hard way as I did. Mrs. Blanchard has been around mines for a long time, and used to be a school teacher. You remember how you used to have to do as the teacher said. Just hunt, pound, walk, but stay behind her. You will not be used to this. Neither was I, but after a few lectures, I found out she knew best. She knows just where each mineral



At the Ora Blanchard mine. Left to right:—Jeanne Smedley, Mrs. Smedley, Mrs. Blanchard, Jack Smedley. Note the mine dumps in rear.

is, and if you are patient, she will take you to most of them. There is also the danger of your getting hurt. She says that she has never had an accident yet, and she doesn't want any.

Then she took me to a spot where she told me she would help me get a good specimen for my museum. It surely was a specimen—a piece weighing around 150 pounds and 18x18 inches in size, covered with blue-green fluorite xls, quartz xls, barite, and some galena. I also obtained about a dozen small pieces.

Then back outside, where we picked up some nice pieces of barite xls, coated with quartz xls, and small fluorite, which had turned white, as does this fluorite when in sunlight. Also got some selenite there.

A short distance up the hill, there were some nice groups of galena with quartz xls, cerussite, and anglesite. Again I got one good-sized piece for my museum.

We drove back down the mountain a short distance to another mine. Just inside, Mrs. Blanchard crawled up under a large air-intake pipe and began digging. Soon she handed me a nice piece of quartz

with linarite on the quartz xls. She then told me to get one for my museum which I did — a piece 8x8 inches of quartz xls coated with linarite and malachite.

Back outside again, she took us to a large dump which covers a large portion of the mountain. There you could spend weeks obtaining some of the choicest mineral specimens you have ever seen. If we only had a place like this in the East!

Some of the minerals there are very rare and are only located there, so she has the right to half of any you may find. Also she limits the amount of specimens you take, but don't be discouraged. I think you will come away well pleased and have way more in value than the one dollar you paid.

We drove back down to Mrs. Blanchard's home. While I was wrapping and packing the beautiful specimens, my wife and Mrs. Blanchard made lunch. While eating, Jack looked at the thermometer and said it was 102°. So you see, it was about 110° outside in the

(Continued on page 269)



Pyroxene sand from Middleton Island, Alaska

Here is an interesting sand that was sent in by Frank Waskey, Oakville, Wash. Mr. Waskey spent many years in Alaska and had collected a large amount of minerals, sands, etc. The sample sent us is a medium grained, dark gray sand consisting chiefly of dark gray pyroxene (green on inside when broken) with smaller amounts of quartz (milky, smoky), green epidote, and a tiny amount of black magnetite.

"Sand from N. E. point of Middleton Island, Alaska (long. 146° -10'; lat. 59° -15'). In the early '90's beach gold was taken from black sand-filled small potholes in the false bedrock along south side of this island. It was afterwards occupied as a blue fox island and was well known for its wealth of wild strawberries and wonderful vegetable gardens, due in great part to its location smack in the Japan Current. Have been trying to secure sand from south beach but without success."—on label.

Magnetite sand from Tom Mix Wash, Ariz.

This is a medium grained, brownish-black sand which consists chiefly of lustrous black magnetite, smoky quartz, and whitish feldspar with very small amounts of silvery muscovite, green epidote, and a tiny amount of red garnet.

This sample was sent us several years ago by Olive E. Looney, 67 Talbot Ave., Rockland, Maine.

"Sample from Tom Mix Wash, midway between Oracle Junction and Florence, in Pima Co., Ariz."—on label.

River sand from Salem, N. H.

From an anonymous reader we have a sand sample that was collected from the Spicket River in Salem, Rockingham Co., N. H. The sample is a very fine grained gray sand and consists entirely of colorless quartz.

"Enclosed sample of sand was taken from river in southern New Hampshire close to bank, color yellow underwater on bright day. Sand comes from Spicket River, Salem, N. H. Very small quantity there."—on label.

River sand from Harmon, N. Y.

Harmon is in W. Westchester County, N. Y., on the east bank of the Hudson River. It has a large beach (1000 ft. long and 100 ft. wide) that is very popular with summer visitors. From this spot which is known as Croton Beach the conductor of this department personally collected a typical sand sample which is a very coarse grained, gray sand. The sand consists chiefly of quartz (colorless and transparent, milky, brownish, smoky, black basanite, red jasper) with some black biotite, microcline (colorless, whitish), red garnet, dark gray labradorite, black hornblende, black magnetite, silvery-white muscovite, and the following rocks: -gray and grayish-green mica schist, gray sandstone, red slate. and in addition red brick, dark gray to brown clinkers, and white sea shells.

Rhodolite sand from Willits, N. C.

From Willits (Jackson Co.), N. C., we have an interesting dark pinkish, med-

ium grained sand sample that consists chiefly of pinkish rhodolite (garnet) with small amounts of smoky quartz, whitish muscovite, and black magnetite. The sample was sent in by an anonymous reader.

Quartz sand from Edmond, Okla.

Glen E. Kiser, Douglass, Kans., one of America's famous sand collectors, sent in this sample which is a fine grained, dark brown sand. The sand consists chiefly of dark brown quartz (stained brown by clay) with a few flakes of silvery muscovite, and some dark brown clay.

"Sand from Hwy 66, east of Edmond (Oklahoma Co.), Okla."—on label.

Creek Sand from Cornwall, Va.

"We just returned from a brief visit at the Irish Creek Tin Mines near Cornwall (Rockbridge Co.), Va. (abandoned). We found the dumps with no trouble at all, but needed an expert 'identifier' with us. We collected a sand sample for you; it comes from Panther Run (creek) which empties into Irish Creek, and lies in Rockbridge County, Virginia."—item received a few months ago from the Rev. and Mrs. William J. Frazer, 625 Main St., Moosic 7, Pa.

The sample is a medium grained, brownish sand consisting of smoky quartz, gray to pinkish feldspar and some dull black magnetite.

Beach sand from Souris, P.E.I., Canada

From Souris, on the N.E. coast of Prince Edward Island, the island province of Canada which lies in the Gulf of St. Lawrence, we have a sand sample that was sent in by Jim Anderson, 14 Brooks St., Manchester, Mass. The sample is a medium grained, brownish sand and consists entirely of quartz (colorless, brownish).

"Beach sand from Souris, Prince Edward Island, Canada."—on label.

Quartz sand from Malta

Malta, an island in the Mediterranean Sea belonging to Great Britain, is 62 miles S.S.W. of Sicily and 197 miles N. of Africa. The island is about 60 miles in circumference, of an oval figure, and has adjacent to it a smaller island

called Gozo, with one or two tiny inlets interspersed.

From the northern coast of Malta, between the cities of Valetta and Citta Vecchia we have a sand sample that was taken from vacant land near the beach by Paul O. Drury, 17965 Arbolada Way, Tustin, Calif. Mr. and Mrs. Drury recently toured Europe, Africa, and the Holy Land and a number of sand samples were collected for us.

The sample from Malta is a fine grained, gray sand consisting chiefly of quartz (colorless, smoky) with some feldspar (gray, brown) and a tiny amount of lustrous black magnetite, also some gray coral and sea shells.

River sand from Matamoros, Mexico

The Rio Grande is a river which rises in southern Colorado and flows southerly and then southeasterly to empty into the Gulf of Mexico. Its total length is about 2,200 miles, and for most of its length it is the dividing line between the United State (Texas) and Mexico.

From the south bank of the Rio Grande, in the city of Matamoros, (Tamaulipas State, the most N. E. state of Mexico) we have a sand sample that was collected for us by Mrs. Clara Roder of Roder's Coral Museum, R7 Box 68, Hot Springs, Ark., when she and Mr. Roder made a recent trip to that country.

The sample is a very fine grained gray sand consisting of quartz (colorless to smoky), brownish feldspar, pinkish garnet, and a small amount of black magnetite.

River sand from Longbank, Scotland

From the south bank of the River Clyde, in Longbank, Renfrewshire, Scotland, we have a sand sample that was sent us by Sandy Ramsay, 1015 Aikenhead Road, Kings Park, Glasgow S4, Scotland. The sample is a fine grained, brown sand consisting of quartz (smoky, brownish, colorless, brownish agate, brownish chalcedony, brownish jasper), pinkish feldspar, and a little brown magnetite.

"River sand, Longbank, River Clyde, Renfrewshire, Scotland. Right opposite Dumbarton Castle."—on label.



WOMEN'S CORNER OF R & M

Conducted by Winnie Bourne

c/o Rocks and Minerals

Box 29, Peekskill, N. Y.

Thinolites from California

Dear Winnie:—

Under separate cover I am sending you one of the thinolites we found. We have been told they were the best crystallized thinolites that had been seen. They differ so from the Pyramid Lake, Nevada, thinolites because they show the separate crystal and are not massive. We have advertized them in R&M and hope the people who bought them were more than pleased.

Do wish you could see this beautiful country out here. Trees, snow-capped mountains, clouds and blue skies. I truly believe it is God's Country! If you are ever out this way please look us up—or any of your readers are welcome to stop in and see us and also our minerals.

We hope to be able to start a thumb-nail or miniature club for the younger people here in our community. We feel it is such a wonderful hobby for any age. We have been purchasing miniature specimens of the very hard to get material and now feel we can start a club and help supply the miniatures too.

Now back to my thinolites. They are found about 7 miles northeast of Levin-ing, Calif., in Mono County, near Mono Lake, Calif.

In 1948 a friend of mine gave me a specimen of thinolite and told me it came from Mono Lake. About 10 years later my husband and I and little girl were visiting my mother in Bishop, Calif., and we got to talking about thinolites. My mother belongs to the Camera Club in Bishop and on one of the outings they came across the thinolites. My mother,

being a rockhound too, recognized the thinolites at first glance. The thinolites occur in the vugs of huge boulders and they are very hard to get out in one piece. The collecting is very rough on one's hands and arms as you have to dig for the thinolites then reach in and pick them out very carefully. It is also very hot in the spring and summer at this location. Nothing but sage brush, rabbit brush, lots of sun, rocks and of course the beautiful thinolites.

Naoma Edel
1007 Bear Cr. Rd.
Bend, Oregon.

Thank you for the specimen, Naoma. It is an extremely interesting one and I am simply delighted with it. To me it is beautiful but fragile-looking so it must be handled very carefully.

Thinolite is a calcite pseudo after some unknown mineral. Your dark gray specimen occurs in interlaced crystals with a skeletal structure. It is easy to see that collecting and transporting them home has to be done with great care—anyone who is lucky to obtain one of your fine specimens should treasure it highly.

—Winnie.

Wants rocks identified!

Dear Winnie:—

Received my first copy of R&M. Found it interesting what I understood but most of it was a little over my head. From this you can tell that I know nothing about rocks and minerals. Have read books and bought boxes of rocks for comparison—unfortunately the specimens do not look like our local rocks. Have many specimens, one of a kind, but do not know what they are. Do you know someone that will identify them for me? I will gladly pay for his services.

Mrs. Charlotte Scott
209 Highland Ave.
Darby, Pa.



Fossil Department

Short items on fossils and their localities are wanted.

Please send them to the
Fossil Department (Rocks and Minerals), Box 29, Peekskill, N. Y.



FLORIDA—"While on vacation in Florida I visited a locality that might be of interest to readers of the Fossil Department. The locality was the Royster Fertilizer Co. section of the phosphate pits on highway 60 in Polk County, between Mulberry and Bartow, Fla. Here my father and I found several fossilized shark's teeth, two canvas pouches full of fossilized rib sections from the manatee, a few vertebrae, and two or three pieces of agatized bone. Any part of the phosphate section of Polk County should yield some interesting fossils."—item sent in by Thomas H. Webb, Linville, N. C.

MICHIGAN—"I am sending a funny little stone which I found in our back field here in Tecumseh (Lenawee Co.), Mich. I thought it was a sandstone but my little boy says it looks like a token of some ancient tribe (about 200 years B. C.). We tried to grind the 'Inscription' off but no luck."—item sent in by Mrs. Clare Handy, 4391 Comfort Rd., Tecumseh, Mich.

The 1½ inch round, flat, disk-shaped gray specimen is a fossilized quartz, the fossils are small corals and sea shells.

The small fossils are so arranged as to resemble an inscription.

MONTANA—"There is a ridge of fossils of marine origin within 15 miles of here which should prove of interest to collectors, and also to students, for it really has no business to be where it is.

The marine fossil beds are located about halfway to the Pine Ridge oil fields, after you leave Route 7, about 15 miles southwest of Wibaux (Wibaux Co.), Mont."—item sent in by Hjalmer Johnson, prop. Lost Cabin Trading Post, Wibaux, Mont.

A 3x3 inch dark gray limestone from the locality was sent in by Mr. Johnson. The specimen is full of large, pearly lustered sea shells which fl. orange.

"Found in nests big as a bushel basket."—on label.

NEW JERSEY — New York, (AP). —The fossilized remains of a hitherto unknown soaring reptile went on display today at the American Museum of Natural History, New York City.

The skeleton, which a scientist said may be 175 million years old, was found recently in a New Jersey quarry by three teen-aged boys.

Dr. Edwin H. Colbert, chairman of the Department of Paleontology at the Museum, said the discovery "has opened up a whole new facet of vertebrate evolution."

Jurassic Age Fossil

He said the fossil, which has yet to be named, is that of a creature that lived in the Jurassic age, at a time when dinosaurs were just evolving.

The earliest known true birds, he said, didn't show up until 60 million years later.

The boys, high school sophomores and ardent amateur paleontologists, are Alfred Siefker, 17, and Joseph Geiler, 16, both of West New York, N. J., and Michael Bandrowski, 16, of Guttenberg, N. J.

Found in Quarry

They found the fossil in a quarry in North Bergen, (Hudson Co.), N. J. The site was taken over three years ago by the Tibbetts Contracting Co. of Yonkers, N. Y., for a shopping center.

The black shale matrix in which the

fossil was imbedded was turned up by a blast, the boys said. About four-fifths of the rock blasted free has been carted away.

"I'm positive there's a great store of fossils in the rock that's being hauled away, quite possibly another of the gliding reptiles," Colbert said.

The skeleton is about seven inches long. Colbert said it glided on wing-like surfaces formed by its elongated ribs.

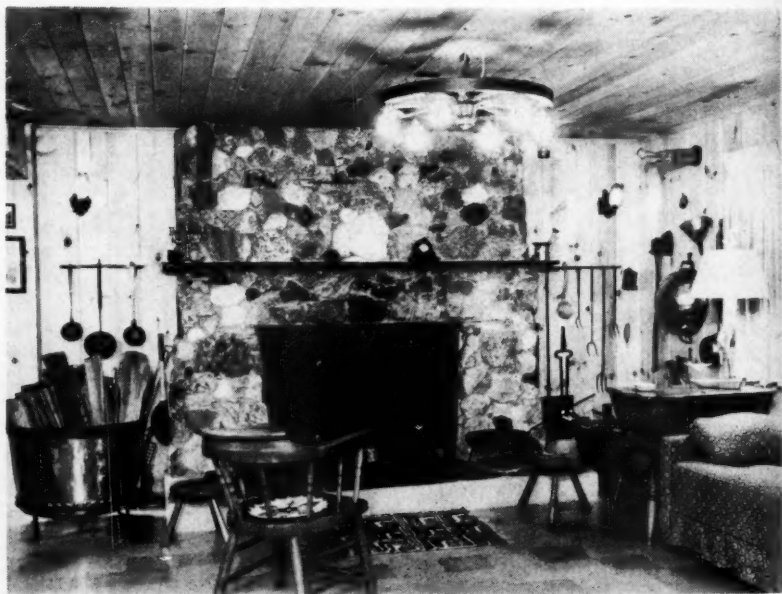
EVENING STAR,
Peekskill, N.Y.
Tues., April 4, 1961

NEW YORK—"I am enclosing an unidentified fossil I picked up in the back

country around Rensselaerville (Albany Co.), N. Y. This area is relatively unknown and very few maps exist of it. However, there are a few really good localities where I have picked up corals, snails, brachiopods, various mollusks and other fossils.

"A good way to make impressions of fossils so you can see their true nature is to carry a few lumps of artist's kneaded eraser. This is very inexpensive and useful."—item sent in by Arthur Waldron, 22 Draper Road, Wayland, Mass.

The little round fossil in the dark gray shale received from Mr. Waldron is a coral, perhaps of a different type than what he had been finding at the locality.



"The above is a picture of our mineral fireplace which a collector has to come to see to appreciate. It not only is full of fine specimens but fluoresces in a pleasing pattern."—sent in by Gerry and Will Shulman, 47 Falcon Road, Livingston, N. J.

COLLECTING FLUORESCENT MINERALS

Conducted by **ROBERT W. JONES, JR.**

210 S. Rose Circle Dr., Scottsdale, Arizona

Now that I have moved from the east coast and am unable to collect the Canadian minerals with ease, I find that I have more hackmanite and wernerite than I ever had. Of the Canadian minerals which fl. these are the best and also best known. Occasionally, I run into a collector out here who looks at me as if I had a rattler in my kit when I mention the two. They are among the brightest and most unusual fl. minerals and deserve the attention I hope to give them here.

Hackmanite is a very unusual mineral because of its reversible photosensitivity. This rare property may be noted in most specimens as a change of color not necessarily related to the effect of fl. When freshly broken, large pieces of pinkish hackmanite show a rich light violet to red color in spots, blotches and larger areas. The larger the area covered by this red color, the richer the piece. After exposure to artificial light or sunlight this red color fades away. This might be thought of as an oxidizing of the freshly exposed mineral BUT after exposing the specimen for a few minutes to ultra-violet light the red color has returned. This same effect can be obtained to a lesser degree by keeping the specimen completely hidden from light sources for considerably longer. This phenomenon can be tried again and again with the same specimen with no apparent loss of color strength.

The cause of this reversing of color from dark to light and back again-tenebrescence—is most assuredly the result of impurities present in the mineral. What those impurities may be has been indicated by various researchers as sodium sulfides and sodium polysulfides. The possibility remains that there may be other impurities or activators adding to

the confusion. Gleason reports that a blue color has also been noted in this Canadian hackmanite which acts somewhat differently from the red color common to the mineral.

One more thought before we go on. I gave a piece of hackmanite to a dealer to cut some cabs for me. The specimen was white but apparently when he cut into it he was surprised to find the red color. He was even more surprised when the red color disappeared as he worked the pieces. I wonder if he ever found out he was not the victim of a joke?

Under LW hackmanite is strongest in its fl. and has been variously described as peach, orangish, pink or what have you. The fl. varies according to the richness of the specimen. The average hackmanite is usually a strong peach color. Gleason reports it as having a frequent persistent bluish phosphorescence. This phos. is commonly noted in the very rich pieces but is decidedly weaker or lacking in the average to poor specimen. This may be used as an indication of the richness of a specimen.

Far more reliable as a check on the richness of the specimen is the relation between the red-purple natural color and the strength of the fl. The very brightly fl. specimen will have the very rich spots and streaks of red-purple in ordinary light, until they fade, of course. This is not a positive test in every case but is reliable for a great majority of the specimens.

Under SW this mineral is not nearly so strong as under LW. The color is the same except for being somewhat weaker. SW does not seem to have as rapid an affect on the "reversing" property as LW does. This would tend to strengthen the

idea that there is a relationship between the fl. and the tenebrescence.

Another strongly fl. mineral from Canada is wernerite, or scapolite, as it is referred to locally. This is the bright-yellow fl. mineral (LW) available. Unfortunately, it occurs only as masses, sometimes weighing many hundreds of pounds, never as crystals.

Under LW light this mineral is a brilliant yellow matched by no other mineral. Under SW it is much duller in color but associated with the yellow fl. will be noted blue fl. tremolite blades, a rather nice combination.

There are at least three localities where this mineral can be collected. The most well known, and poorest producer now, is the old McGill farm in Pointe Au Chene. The old many-sided house will be remembered by anyone who visited there. The material from this location has a decided "woody" appearance which is not as desirable as the stronger fl. green translucent type. A second locality which yields this same "woody" looking wernerite is quite far above Montreal and not as easy to get to as the McGill farm. This old farm is just north of Route 8 along the Rouge River. The owners are very cooperative and will escort collectors out to the locality, asking only that common courtesy be observed. Most of the material found will be small, yellowish in color and have a grain pattern giving it the appearance of wood.

I have already referred to the green translucent type of wernerite. This is the most desirable to obtain since it fl. the strongest and is very fine material for cutting and slabbing. The exact location of this mineral is a closely guarded secret known to very few people. Fortunately, those who have this knowledge supply the needs of others very nicely. I have been the fortunate owner of many large masses—up to 100 pounds—in the past and still experience no difficulty in getting all I want.

Both hackmanite and wernerite are excellent cutting materials. I have cabs

cut from both minerals and they take a good polish. Polishing also enhances their fl. and is used to good advantage on these fl. minerals. I might warn prospective users that wernerite is a very tenacious material. I have spent more than one morning futilely pounding on a large boulder with little success. It is not an easily attacked mineral.

Recently, there has been a new book on the fl. of minerals put on the market. I have refrained from reviewing it simply because this is being done by a number of publications. I must acknowledge it here, however, because it has had a hand in contributing to some of the notes here on hackmanite. I recommend the book to all collectors and, for the fl. collector, it is an absolute must addition to the library. Mr. Sterling Gleason is the author and the book is entitled "Ultraviolet Guide to Minerals". Get a copy and use it. I can think of no other way to help learn more about fl. minerals.

Now that summer is on the way, may I add my pleas to those of other collectors. When you go to a site to collect please don't do something which will mean you'll be the last collector ever allowed to collect the area. Leave it neat, thank the owner for giving you permission to enter and collect and show him what you found. Getting him interested in minerals will make it easier for other collectors to get permission.

Editor's Note:—Gleason's "Ultraviolet Guide to Minerals" is published by D. Van Nostrand Company, Inc., 120 Alexander St., Princeton, N. J. Price \$6.95.

Wants to hear from friends!

Editor R&M:—

I enjoy R&M very much and would not think of doing without it.

I am now not able to walk any more so would like to hear from my friends that would send me a slab or some cutting material—would be glad to pay the postage.

Fred Nelson
3105 Poisnetta Drive
Colorado Springs, Colo.

THE 2ND HEART OF CONNECTICUT GEM AND MINERAL SHOW

SPONSORED BY THE NEW HAVEN MINERAL CLUB

"The SECOND HEART OF CONNECTICUT GEM AND MINERAL SHOW plans are very near completion. On Saturday, July 15 and Sunday, July 16, 1961, the show will get under way at the American Legion Hall, Neptune Avenue, Moodus, Connecticut (off Conn. Route 151) at 10:00 A.M. until 10:00 P.M. on Saturday and from 10:00 A.M. until 7:00 P.M. on Sunday. Admission to the show will be \$1.25 for adults and \$.50 for children under 12. Tickets will be good for both days of the show.

The show committee has plans for giving door prizes to anyone purchasing a ticket for the show, whether they are in attendance at the drawing time or not. This year, gem and mineral specimens, subscriptions to **ROCKS AND MINERALS**—the rockhounds guardian, and many other door prizes will be given, on the hour and every hour that the show is open.

Prizes will be given to the best exhibits from participating clubs and individuals. If your club or any member wishes to participate, please contact the show committee to reserve exhibition space. Among the exhibitors already planning their exhibit is Mr. David Seaman, Scientific Assistant in the Mineralogy Department of the American Museum of Natural History in New York City. Also planning to exhibit is Mr. Richard Schooner, author of "90 Minerals of Collins Hill" and various other publications, who will exhibit his fine collection of rare minerals.

This year, Mr. Neal Yedlin, President of the New York Mineralogical Club, Inc. and author of the column in **ROCKS AND MINERALS** called the "Micro-Mounter" will speak on micro-mounts during the show. Mr. Yedlin is well known in the rock and mineral circles for his excellent slides and talks on micro-mounts. We feel certain that this will add tremendous interest in our show. Mr. J. Kessler, of Althor Products, 2301 Benson Avenue, Brooklyn 14, N.Y., has donated micro-mount boxes to be distributed to our guests. These will be distributed to our guests until the supply is exhausted. However, we feel certain that Mr. Kessler's generosity will make it possible for everyone to receive a free micro-mount box.

Field trips to collecting areas are being planned at the present time. The show committee is working on several fine localities in the Moodus area which have not been explored to their utmost. Last year's field trips were highly rewarding and this year, the committee feels that it should out-do the field trips held last year. Come prepared to collect all afternoon. With our own refreshment accommodations on the premises, we will be in a position to offer box lunches to take on the

field trips to be held on both days. Those people wishing to remain at the show will find that there are hot lunches as well as 'quick refreshments.

In the evening, there will be a motion picture for young and old alike. Last year, the committee had a film entitled "Diamond is Forever". Those who attended will remember how well it was received. This year, the film is entitled "The Petrified River."

A swapping area will be set up this year to allow people to swap in more comfort than last year and in a position which will enable more of them to engage in their activities. With the plans now under way, we feel sure that the traders will enjoy their facilities more than ever.

Booklets of the important collecting areas of Connecticut with maps of those areas will again be available. This year, the committee will be adding new locations to make the booklets interesting and profitable to our old and new friends alike.

Parking on the premises is more than adequate. This year, we will organize the parking so that field trips may depart on time and without delays. There will be trip leaders to take the collectors to the sites and policemen to help with the routing. All in all, we might just say—drive—the pleasure is awaiting you at the collecting areas.

The dealer's booths are all filled and this year promises to hold forth more and better mineral specimens as well as excellent jewelry material than last year. Those people interested in choice specimens will find them at our show.

Another President's meeting will be held on Sunday morning, 10:00 A.M. to discuss the events of the past year, materialization of those plans and plans or suggestions for the coming year.

For those hardy souls, Hurd Park in East Hampton, Conn., just about 5 miles from the show offers camping facilities of 698 acres of wooded park with cleared areas for picnicking, some of it along the Connecticut River. The camping fee was \$1.00 daily last year and at the present time appears to be the same for this year. There are excellent accommodations in this area and a list is being prepared with the prices and locations. If anyone is interested in receiving this listing, please write "THE SECOND HEART OF CONNECTICUT GEM AND MINERAL SHOW COMMITTEE" care of Mrs. Helen M. Gallant, General Chairman, Box 32, Moodus, Connecticut. As soon as this listing is compiled, it will be forwarded to you.

(Continued on page 269)

A SNOWBOUND ROCKHOUND

By H. H. HEALD

Pouring through each book I own
On rocks and minerals, all alone
I sit and fidget, moan and groan,
For I'm a Snowbound Rockhound!

Don't know how I'll wait 'till Spring,
Winter drags like anything!
All the song that I can sing
Is I'm a Snowbound Rockhound!

Get with friends where'er I can,
Drawing up our Summer's plan,
But I'm a most unhappy man,
For I'm a Snowbound Rockhound!

Looking o'er last Summer's haul,
Man! We really had a ball,
Finding Beryl and Quartz and all,
Now I'm a Snowbound Rockhound!

When the ground at last is bare,
I'll go mining everywhere;
Then no more will I declare,
I'm a Snowbound Rockhound!

Dear Editor:

"Enclosed you will find a poem that this last big Snowstorm inspired me to write, since I had thought Spring was already here and had begun to dig out my collecting paraphernalia.

"This probably is too late to make the winter editions of R&M. I have felt this way all winter but didn't have any poetic inspirations.

"I hope to see it in your wonderful magazine sometime, anyway, as I am sure most Rockhounds feel as I do, if they live where Old Man Winter comes calling every year."—letter dated March 10, 1961, from H. H. Heald, Morrell St., Buckfield, Maine.

50,000 FLUORITE SPECIMENS!

Editor R&M:

After a couple days of field trips at the conclusion of the Eastern Federation Mineral Show held in Asheville, N. C., August 1960, we went westward through Tennessee into Kentucky and there visited Mr. B. E. Clement at Marion and saw the greatest collection of fluorite specimens imaginable—by his estimate, over 50,000 pieces. Then across southern Missouri to Carthage, my wife's birthplace, where we gave up rock hunting for a few days in favor of 'tombstone hunting'. Thence into the Oklahoma portion of the Tri-State District and then for an unforgettable trip through Arkansas. By the time we reached the Louisiana border we had the car so loaded with rocks I had to refuse to buy my wife a watermelon for fear the added weight would sound the death knell of the rear axle.

Vertrees Young
P. O. Box 1109
Bogalusa, Louisiana

Dear Rock Lovers!

We owe our discovery of this wonderful hobby of mineral collecting to R&M. Our basement has been turned into a small mineral museum since 1958 and we now call it "Cheneveys Rock-a-rama.

Stop and see us if you are in our area.

Frank and Catherine Chenevey
727 S. Mill Street
Orrville, Ohio

10 YEARS OLD AND A SWAPPER!

Editor R&M:

My name is Bryce Rumery and I am 10 years old. I have many duplicates that I would like to swap with other collectors.

Would anyone be interested in Vesuvianite, Plumosa Mica, Staurolite Xls., Marine Fossils, etc.?

At present my mother has to be my secretary. I can talk on rocks by the hour and you can not stop me but I do not do so well at spelling the words I have memorized.

Bryce Rumery
75 Ocean House Rd.
Cape Elizabeth, Me.

Midwest Museum Needs Specimens

The Sioux City Public Museum, Sioux City, Iowa, is in need of minerals. At the present time it has some 200 specimens, all common and none good. We have the potential here to develop a museum that can (or could) compare favorably with any in the Midwest and this is sorely needed as no research or study facilities are available in this area. We will accept material on loan or a gift, the donor will receive full credit in the displays. Everything of a mineralogical nature is needed (no rough or polished material is needed however at present).

Readers who may be interested in contributing to the museum's mineral collection are urged to send them to Sioux City Public Museum, Department of Mineralogy, James M. Allen, Curator, Sioux City, Iowa.

SPRUCE PINE TO HOLD THIRD FESTIVAL

August 2, 3, 4, 5, 1961

Plans for the third annual Mineral and Gem Festival have been announced by the Spruce Pine Chamber of Commerce, the sponsoring organization responsible for the highly successful festival held in August of last year. Mrs. G. B. Sproles will be the general manager, according to Mr. Brad Ragan, Chamber President.

On the banks of the Toe River in the mountains of Western North Carolina, Spruce Pine is widely known as the center of a district where mica, feldspar, kaolin and iron have been mined commercially for many years and where other minerals in lesser quantities including numerous gemstones.

Dates for this year's festival are August 2, 3, 4, 5, 1961. Last year more than 3,000 rockhounds and other interested persons flocked to the second Spruce Pine Mineral and Gem Festival. Attendance is expected to be much larger at the 1961 festival, when the exhibits will be not only more numerous but more extensive.

Prizes are being offered in various categories for competitive exhibits by individuals, mineral societies, schools and dealers.

Lectures by prominent geologists and gemologists and the showing of technical motion pictures will be featured.

Guided field trips will be conducted to selected mines and other points of interest. Information about additional field trips will be supplied to festival visitors who may wish to make them on their own.

In addition to being noted for its mining activities, Spruce Pine is also widely known as the center of a popular summer resort area. With weather, even in August, when blankets usually feel comfortable at night.

Other summer resorts within a radius of 25 miles include Linville, Linville Falls, Banner Elk, Bakersville, Burnsville, Little Switzerland, etc.

The many spectacular scenic attractions include the Blue Ridge Parkway, the remarkable two-lane motor highway that leads into the area along the very crests of the ridges. At Gillispie Gap on the Parkway, five (5) miles south of Spruce Pine, is the Museum of North Carolina Minerals, only museum of its kind, visited annually by thousands of rockhounds and others. Admission is without charge.

Mt. Mitchell, with its 6,684-foot summit, the highest in Eastern America, is easily reached via the Parkway. Motor roads also

lead to the tops of 6,300-foot Roan Mountain and 5,939-foot Grandfather Mountain. The Roan is known among rockhounds for its deposits of the beautiful gem material, unakite.

Near Little Switzerland is one of the few Emerald Mines ever operated commercially in the United States. Near Spruce Pine are two aquamarine mines and a soapstone mine. One of the largest amphibole asbestos mines in the world has long operated near the famous Cranberry Iron Mines, which has been mined for the past two years after being closed for a long period. Olivine has been mined at Green Mountain. Halloysite, vermiculite and several other of the state's 300-odd minerals have also been mined in the Spruce Pine district.

Many persons devoted all or spare time to producing the old-time handicrafts. The internationally famous Penland School of Handicrafts, largest strictly crafts school in the United States, offers instruction in more than 60 different crafts. Useful and decorative articles of hand-wrought iron are turned out by forges, one of which is operated by Daniel Boone VI. The numerous other craft activities include chairmaking, basket weaving, rug making, pewter and copper hammering, jewelry set of the native gems, pottery, etc.

Painting classes and summer theatre are conducted in Burnsville.

Recreations in Spruce Pine and surrounding areas include golf, swimming, fishing, mountain climbing, etc., in addition to searching for mineral specimens.

Instead of sidewalk stands for the sale of homemade lemonade, children set up along the roadsides booths with signs reading "Rocks for Sale."

The long list of minerals found in the Spruce Pine district includes, in addition to those already named, garnet, hyalite, glass-clear oligoclase, pink oligoclase, sunstone, actinolite, ruby and sapphire, corundum, apatite, allanite, black tourmaline, albite, orthoclase, samarskite, autunite, columbite, amazonite, bornite, covellite, malachite, chalcophryite, sphalerite, massive beryl, gummite, torbernite, monazite, chrysolite, thulite, talc, almandine, pitchblende, golden beryl, zircon, rutile, kyanite, and smoky, clear and rose quartz.

The swap shop, where no money changes hands, was a popular feature of last year's Spruce Pine Mineral & Gem Festival, and is expected to be even livelier this August.

PROFESSOR OF ROCKS, MINERALS AND MEN

On March 7th, 1961, there passed away in Washington, D. C., at the age of 82, an eminent petrologist, mineralogist and teacher, Esper S. Larsen, Jr.

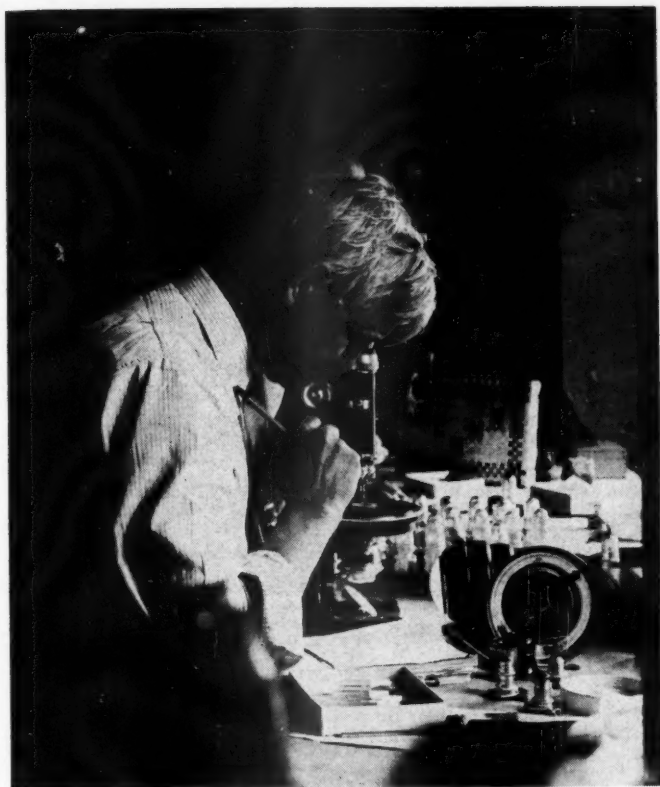
Professor Larsen's contributions to geological science will live on after him as among the foremost and most useful of our time. Best known and most useful of any, perhaps, is his early work in determining and tabulating the optical properties of all known non-opaque minerals. This was published in 1934 as U. S. Geological Survey Bulletin 848. Dr. Harry Berman was co-author, but the actual determinative research on about 1500 minerals, a monumental task, was Larsen's alone. The Larsen-Berman Tables remain the greatest single contribution ever made to optical mineralogy. These data are of inestimable use to all of us who work with minerals—turn to any mineral known before 1934 in Dana's System or Textbook, and the optical properties given, among the most significant in defining the unique identity of any species, will be those of Larsen. Furthermore, the very techniques and teaching methods of optical mineralogy in this country, are the ones created by Dr. Larsen and passed on by him to others.

Dr. Larsen was most of all a petrographer and petrologist, studying rocks microscopically by means of thin sections (such petrographic study depends on the determinative techniques of optical mineralogy) and concerned throughout his career with broadscale petrologic study of igneous rocks from various western regions, their field relations and their character and origin. He was an unexcelled field geologist and a rock collector who never stopped collecting and observing every rock he ever saw. We who collect minerals, need his example to remind us that the full meaning of our specimens is lost to us, unless we take a keener interest in the rocks associated with them, which are the key to their origin and the geological environment from which they came.

Dr. Larsen was a creative scientist who had new ideas and developed new methods of geological research to put those ideas into practice. In his seventies after retirement as a teacher, he did remarkable research work in the Geological Survey in geochemistry and in the tracing of rare elements in rocks and minerals. He became especially interested in dating ancient igneous rocks and developed an extraordinarily useful age-determinative method for those rocks, using the common mineral, zircon, present in them. This is known as the Larsen age-determination method.

Many honors came to Dr. Larsen for his scientific achievements. He received the Penrose Medal of the Geological Society of America in 1953 and the Roebling Medal of the Mineralogical Society of America in 1941. In 1928 he was elected president of the Mineralogical Society of America. He was a member of the National Academy of Science.

Regardless of all the scientific achievements, his greatest contribution was his teaching. He was professor of petrography in the Mineralogy Department at Harvard from 1923 to 1949. If you had attended just one or two of his classes, you might have wondered about the efficacy of his teaching. For the Professor was disarmingly informal in manner and woefully forgetful — one story has it that when writing on the blackboard in informal seminars at his home, he was apt to put the piece of chalk in his mouth, and try to write on the board with his cigarette! And he rambled all over the place in his lecturing, speaking in such a simple and self-deprecatory way, that a stranger never would take him for an outstanding scientist. But if you had been one of his students and had kept coming to his classes, gradually the solid substance and practical meaning of all he taught would begin to sink home. Chief among the lessons one lastingly learned, were those of forever keeping an open mind; questioning dogmatic statements



Esper S. Larsen, Jr.

and too-accurate data, even in a textbook, unless these could be checked and confirmed; going one's own way and depending most of all on one's own common sense, observation and experimentation along the slow pathway to scientific knowledge.

Above all else in that teaching, we who were his students felt the presence of the man himself, his kindliness, concern for others, simplicity, gentleness and humility. This was what was added to the scientific excellence to make him a great teacher. And one wonders whether it was not the science that became enlarged through the transforming power

of those other qualities. The science and the human qualities both, made the Professor a teacher beloved and remembered by all his students as few teachers of geology ever have been remembered.

Science is cold and lifeless unless it can be illuminated and transformed into something accessible, understandable and useful to men. Professor Larsen's science was greatest because of the man behind the scientist. And all of us who knew him and felt the warmth of his influence, will carry on his teaching after him by being better scientists, and better men.

Arthur Montgomery

IN MEMORIAM

GEORGE W. GEHMAN

George W. Gehman, dean of the mineral collectors of eastern Pennsylvania, was called by the Great Architect of the Universe from his home at Oxford, N.J., Sunday night, February 5, 1961, at the age of 89.

He was born in Reading, Pa., and worked as a draftsman for the Bethlehem Steel Co., in Bethlehem, Pa., and later for the Treadwell Engineering Co., in Easton, Pa., until his retirement in 1947. After his retirement he confined his mineral interests chiefly to study, micro-mounts and an occasional field trip to the Williams quarry near Easton, Pa.

In 1914 he made mineralogical history in Pennsylvania and the U. S. with his discovery of the rare thorium-uranium minerals in the Williams quarry.

In 1931 the Committee on Geologic Time of the U.S. Geological Survey sent a team of experts to Easton in order to make a thorough study of this occurrence. This was the first authenticated occurrence of thorianite and thorium-rich

uraninite in the United States. The study determined that these minerals are 800 million years old. The only other reported occurrences of thorianite then had been in Ceylon, Madagascar and Siberia.

In 1955 Mr. Gehman turned his fine mineral collection over to Lafayette College, part being gift and part purchase. Dr. Arthur Montgomery of Lafayette calls the Gehman minerals "scientifically priceless" because of the variety of unique thorium-uranium minerals from the Easton area preserved for research.

It has been my privilege to share George Gehman's friendship for nearly thirty years. He was always very generous with knowledge, experience in collecting, and specimens.

John H. Bertrand

References to Gehman Minerals:

Wells, Fairchild and Ross, Thorianite from Easton, Pa., *Am. Jour. Sci.*, 5th series, 26, 1933, pp. 45-54.

Gehman, G. W., Some minerals of the Serpentine Range near Easton, Pa., *Rocks and Minerals*, 11, 1936, pp. 90-91.

Montgomery, A., Three occurrences of high-thorian uraninite near Easton, Pa., *Am. Mineralogist*, 42, 1957, pp. 804-820.

A TRIBUTE TO GEORGE GEHMAN

George Gehman was an outstanding old-time collector of a type now almost extinct. In his early days, when he started off on a field trip, whether to Franklin, Paterson, or even Haddam, he would put his knapsack on his back and set off across country on foot. His keenness of observation and patience in searching for minerals were exceptional. The hundreds of specimens of uranium-thorium minerals he discovered at the Williams Quarry near Easton, were mostly chunks of nondescript serpentine rock in which were imbedded a few tiny black grains of insignificant appearance. And there were no Geiger Counters in those days; he had to identify the uranium by chemical means. For all of his collected and exchanged minerals, he had no published references or specialist friends to help him in their identification. He did it the hard way, by chemical testing, and when he

labelled a specimen, he knew both what it was and what was in it. His determination of all minerals in his collection, was accomplished with thoroughness and accuracy. All specimens were numbered, catalogued and personally identified—and he knew every tiny detail of interest about each one. His knowledge of the field relations and geological occurrences of his minerals, was recorded indelibly in a mind that was keen and forward-looking and receptive to knowledge up until the last several years of his long life.

It was my pleasure to have known George Gehman as amateur mineralogist and good friend. He is a link for me with the past, with its flavor of localities and collectors long since gone; and for the future, he remains for all of us an example of what a collector, and a man, should be.

Arthur Montgomery

ANOTHER TRIBUTE TO GEORGE GEHMAN

Back in 1925, before ROCKS AND MINERALS was even thought of, I made an exchange with two collectors, one in Franklin, N. J., and the other Mr. Gehman. The Franklin collector sent such junky stuff that it was all thrown away and left me terribly disappointed and disillusioned. But when the material arrived from Mr. Gehman (from Williams quarry near Easton, Pa.) it was all so beautiful, of good size and quality, that I was overjoyed and wanted to share my joy with others. This exchange

with Mr. Gehman was the one great influence which induced me to put out ROCKS AND MINERALS a year or so later.

Mr. Gehman was always of considerable help and encouragement—donating many fine minerals, notes, and even an article or two. He was a warm friend of mine ever since the first exchange and I will always remember him with deep gratitude for his many acts of kindness and help.

Peter Zodac

Standard Beryllium Corp. purchases huge beryl deposit

New York City, Feb. 10, 1961—Philip L. Brandon, president Standard Beryllium Corp., New York City, confirmed that the company has purchased the Boa Vista concession in Brazil and is now the sole owner and operator.

Boa Vista consists of over 1700 acres approx. 200 miles north of Rio de Janeiro. The property is $\frac{1}{4}$ mile from the Rio Doce River, approx. 1000 feet from the main road from Victoria to Governador Valladares and $1\frac{1}{2}$ miles from the railroad station at Barra Doque in the state of Minas Gerais, Brazil.

Boa Vista's beryllium is in the form of beryl, a mineral which in its pure state contains a maximum of 14% beryllium oxide (BeO). The mineral is contained in schists. These schists are much larger than any found in the United States. In an area equal to 20% of the total, proven reserves amount to 2,100,000 tons beryl, with an additional probable 864,000 tons.

NEW MEXICO (Continued from page 255)

sun, but who would notice the heat with all those minerals!

We then said good-bye to one of the nicest women rockhounds I have ever met, with the promise if we ever go back out that way we would stop again.

So if you go through New Mexico, be sure to visit Mrs. Blanchard and her mine. If you cannot make it to New Mexico, stop in and see our museum where I have some of the minerals found there.

FACETING THE UNTOUCHABLES!

"Faceting the Untouchables" is the title of a superbly illustrated talk to be given by Mr. Victor Pribil of New York, as one of the features of the big Miami, Fla., show in August.

The "Untouchables" in this case are stones of 3 and less in hardness and those who were privileged to view Mr. Pribil's blue ribbon-awarded display at the Eastern Federation Show last year, can testify that he certainly has the secrets which he promises to divulge in Miami.

Nearly three years have been spent by this leading Eastern faceter in working up this lecture and the many exceptional colored slides which he uses to illustrate said.

Outstanding displays of faceted stones will be seen at the Miami show with a top number in competition for the NATIONAL AWARD OF THE AMERICAN FEDERATION.

Henry B. Graves
Publicity Chairman

HEART OF CONN. SHOW (Continued from page 263)

Plan to come early and stay late. Everything is being planned to give you two days of visiting with rockhounds from all over—to collect from famous pegmatites and to swap for materials from other parts of the United States. Our dealers represent all aspects of the gem and mineral trade and offer excellent specimens for reasonable prices.

So plan to visit the "LAND OF THE MOODS NOISES", the center of INDIANLAND, and THE HEART OF CONNECTICUT.

CURRENT EVENTS

of the
EASTERN FEDERATION OF MINERALOGICAL AND LAPIDARY SOCIETIES

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SECRETARY

Mrs. Marguerite Collyer
49 Green Road
West Nyack, New York

NEW EASTERN FEDERATION EMBLEM



We are pleased to present the new emblem of the Eastern Federation of Mineralogical and Lapidary Societies.

This is the winning design submitted by Mrs. Julian Wetherbee of the *Keene Mineral Club*, Keene, New Hampshire, and adopted at the 1960 convention in Ashville, North Carolina. Any club which wishes to buy one of the dies may send an order for it to Roy E. Clark, 930-19th Street, Newport News, Virginia. The cost is \$2.50 each. Orders will be sent to the company only when ten or more have been paid for, therefore there may be some delay in filling orders. We regret this, but the company which makes the dies will not fill an order for less than ten. The emblem may be obtained in three sizes, $\frac{3}{4}$ inch, one inch and one $\frac{1}{4}$ inch.

SEVEN CLUBS JOIN EASTERN FEDERATION

Seven new clubs have been admitted to the Eastern Federation of Mineralogical and Lapidary Societies to swell the total to an all-time high of seventy-four.

Northernmost of the new societies is the *Mohawk Valley Geological Society*, Clinton, New York. Starting with 8 members in 1959 it has grown to the present 36. It has the good fortune to be affili-

ated with Hamilton College, where meetings are held on the second Saturday of the month. Officers include Alvin Snyder, President, and Adrian Lebus, Secretary, 12 Sherril Lane, New Hartford, New York.

The New York Southern Tier Geology Club, Binghamton, New York, gives the Empire State its twentieth such organization, with fifteen of them members of the Eastern Federation. Donald B. Pitcher is President and the Secretary is Harry L. Dunn, 2616 Robins Street, Endwell, New York.

The Delaware Mineralogical Society, Inc. Newark, Delaware, is the first in the Blue Hen State. The President is Adrian L. Oliver and the Secretary is Mrs. Edward Leach, 1009 Mayflower Drive, Newark, Delaware.

The Central North Carolina Mineral Club, Inc., Raleigh, North Carolina, is the eighth Tarheel club in the Eastern. With the facilities of three universities so close at hand this club has an enviable source of good programs. Lloyd Allison is President and James T. Maddrey, Secretary, Rt. #6, Leesville Road, Raleigh, North Carolina.

The Unaka Rock and Mineral Society, Johnson City, Tennessee, meets on the third Tuesday night of the month at the East Tennessee State College. In the short time that they have been organized their number has grown to 28. Field trips are scheduled for twice a month.

Mrs. Charles Lyle is the President and Miss Merle Price, Secretary, 420 Highland Avenue, Johnson City, Tennessee.

The Mid-Georgia Gem and Mineral Society, Macon, Georgia, has 50 members, and meets on the first Monday of the month at the Macon Youth Museum at Wesleyan Conservatory in Macon. Plans are underway for a gem and mineral exhibit at the Georgia State Fair in October. Milton L. Reiner is President and the Secretary is Ronald L. Palmer, 3245 Seminole Avenue, Macon, Georgia.

The Spanish Trail Mineral Club, Marianna, Florida, over in western Florida near the Georgia line, completes the list of new member clubs. Harold F. Schollman is President and the Secretary is Mrs. C. P. Finlayson, 512 Daniel Street, Marianna. The club meets in the auditorium of the Science Building at Chipole Junior College on the fourth Tuesday night of the month.

Your editor speaks for all the Federation members in extending a cordial welcome to the newcomers. We look forward to becoming better acquainted in the future, and it will be a pleasure to pass on news from these groups through this column.

WHAT GOES WITH OUR CLUBS

The Alabama Mineral and Lapidary Society, Birmingham, Alabama, recently held an auction, with Jimmy Davis doing the honors. Money goes toward buying a slab saw. Some of their members will soon participate in an archeological "dig" when the Alabama Archeological Society begins a scientific excavation in Colbert County. Several years ago Hal Kleine, of the rock club, found a flint point which proved to be similar to those found near Sandia, New Mexico. The latter site was occupied by men as much as 40,000 years ago, so the Alabama search is an attempt to learn whether or not men were living in the Southeastern states that far back also.

The Gem Crafters of Miami, Florida, are concentrating most of their energies on the forthcoming Eastern-American Show and Convention, of which you will hear directly from their publicity chair-

man.

The Georgia Mineral Society, Atlanta, Georgia, heard a talk on Quartz by Frank Ingram, then went on a field trip to hunt for it in near-by Alabama, with Carl Fox, Jr. in charge. Later in March the Gem Club heard a talk by Mr. and Mrs. Albert A. Lacour, and viewed the collections made by the speakers in the West. A "swap session" is a regular feature of this club's meetings and is proving an excellent means for "sharing the wealth". Junior members recently competed for mineral specimens by writing essays on "Why I Enjoy Being a Pebble-Pup".

The Tri-State Rockbounders, Brass-town, North Carolina, draw members from North Carolina, Georgia and Tennessee. At the February meeting, Tennessee was the main attraction, when Mr. William Swafford of Chattanooga talked on fossils and displayed plant fossils found in coal and shale from that state. Mr. M. Nestell of Collegedale, Tennessee, also displayed fossils, mostly of marine animals. Mr. R. E. Russell of Chattanooga displayed rocks and minerals from Tennessee. Dr. George Size, who is Treasurer of the Eastern Federation, is President of the Tri-Staters and Mrs. R. E. Russell is Secretary.

The Southern Appalachian Mineral Society, Asheville, North Carolina, held its 30th annual meeting in January. At that time Dr. Martin Wadewitz was installed as President and Mrs. R. R. Williams, 107 Evelyn Place, Asheville, North Carolina, as Secretary. The guest speaker on this occasion was Mr. Earl Van Horn of Murphy, North Carolina.

The Gem City Rock and Mineral Society, Erie, Pennsylvania, is planning its second annual show for June 23 and 24, 1961, at the Marine Armory in Erie. Miss Miriam Kuhns, 364 E. 21st Street, Erie, is Co-Chairman and will be glad to hear from all who are interested in exhibiting.

The Mineral and Lapidary Society of Pittsburgh, Pittsburgh, Pennsylvania chose March for a "Do It Yourself" Program. Members brought favorite specimens and

jewelry and made brief talks on their chosen pieces.

The Rockland County Mineral and Gem Society, Spring Valley, New York, joyfully reports that their President, Charles T. Fray, has recovered from a recent illness and is back at his job at Columbia University, where he does research work, studying the cores brought up from ocean bottoms. Twenty-three young people have formed a Junior Club and with the Seniors enjoyed a program on Fossils presented by Mr. Joseph Kucher. Following the regular meeting this club has a half-hour "bonus" meeting, an educational period designed to aid newcomers to become better acquainted with their new hobby.

The Miami Mineralogical and Lapidary Guild, Miami, Florida, announces that seventeen Juniors and twelve Adults completed the lapidary course in 1960 and most of them have signed up for the advanced classes for 1961. The February meeting featured the club's Pebble Pups on "Ways of Identifying Minerals", as adults were all busy with plans for the March Rock-oree. Their March bulletin had a story about Mrs. Olga Van Kirk, whose work with both metals and stones has been taking first prize at shows for years.

The North Jersey Mineralogical Society, Paterson, New Jersey, has an active Library Committee headed by Miss Beatrice Gosling, and it is doing an excellent job of disseminating information to members. Gene Vitali is President and Olive Weimann, 59 Rodney Street, Glen Rock, New Jersey, is Secretary. Paul Seel of Bala Cynwyd, Pennsylvania, was the February speaker and his subject was "Quartz Crystals". The State of Maine was featured in a talk by Prof. E. F. Pratt of Upsala College, East Orange, New Jersey, at the March meeting.

The Geological Section, Buffalo Society of Natural Sciences, Inc., Buffalo, New York, held its annual exhibit at the Museum from March 3rd, 1961, through April 7th. Mineral and fossil specimens were displayed, and there was a showing of the Shell Oil Company's film, "The

Fossil Story". What sounds like a "dream" field trip was made to Ward's Natural Science Establishment at Rochester, New York, with Anthony Sojka in charge. The manager of Ward's, Mr. David Jensen, spoke to the club at the April meeting, telling about a recent trip to Europe and showing slides made in the ten countries he visited.

The New York Mineralogical Club, Inc., New York City, is already making plans for November, 1961! At that time they will celebrate their 75th anniversary. In the meantime they continue to enjoy some very interesting programs. In February Dr. Ralph J. Holmes spoke on the use of various modern techniques in the study of minerals of the Niccolite Group and in March Dr. John F. Schairer talked on the chemistry of common Rock Forming Pyroxenes. A week-end trip to Cornwall, Pennsylvania, is under consideration. Neal Yedlin is President and the Secretary is Thomas Ronan, 2436 Marion Avenue, Bronx 58, New York.

The Lynn Mineral Club, Lynn, Massachusetts, elected Walter Richardson as President and Evelyn L. Doran, 14 Mountain Avenue, Saugus, Mass., as Secretary. Their January program featured colored slides, made by Mr. and Mrs. Ellsworth Stevens, of gold-panning in Maine and a trip to Nova Scotia.

The Westminster Mineral Club, Westminster, Massachusetts, has the good luck to have a clubhouse where they can display their mineral specimens in permanent exhibits. Vance Butterfield is their new President, and the Secretary is Mrs. Jeanne Loiselle, 21 Longwood Avenue, Fitchburg, Mass.

The Keene Mineral Club, Keene, New Hampshire, is close enough to the two Massachusetts clubs that the members can visit at each other's meetings, and attend field trips together, and exchange program material, thus tripling the advantages of each club. The February meeting had to be cancelled because of a blizzard, and the March meeting featured a talk on Uranium by Julian Wetherbee. Mrs. Wetherbee is the new Secretary.

The Miami Mineral and Gem Society, Miami, Florida, recently installed Fred Metz as President and Mrs. Sue Siddons as Secretary. At the January meeting they held a mineral-guessing contest. The member who correctly identified most of the 50 minerals used was given a prize. A two-day Field Trip is under consideration.

The West Essex Mineral Club, Caldwell, New Jersey, meeting in the Verona Public Library, has enjoyed a most interesting series programs. September was "Round-up Time"; October featured a talk by the assistant state geologist, Mr. Parillo, on the "Geology of New Jersey"; in November they held a "Jewelry-Making Workshop"; December brought a Christmas party; January featured a talk on "The Concept of Time" by Dr. H. Montero; February brought twelve new members into the club, where they viewed a film on "Crystals". Russ De Roo is scheduled to speak in March. Mrs. C. L. Freeman, 5 Woodrow Place, W. Caldwell, New Jersey, is Secretary.

The Monmouth Mineral and Gem Club, Monmouth, New Jersey, in their March bulletin, list tentative plans for the year's field trips. This is the work of George Dunn, who adds a lists of safety rules which we hope he will pass on to Sylvia Wadhams for her Safety Bulletin. Peter Farley had a diagram showing how to make an all-purpose clamp from an ordinary spring type clothespin, which he says is a big help in putting caps on baroques.

The Capital District Mineral Club, Albany, New York, enjoyed a program that was really out of this world when, in February Dr. Brian H. Mason spoke to them on Extra Terrestrial Mineralogy. Dr. Mason is Professor of Mineralogy at Columbia University and Curator of the Department of Mineralogy of the American Museum of Natural History, and a leading authority on meteors and meteorites. His talk explored the various theories about the origin and composition of these mysterious specks from space.

The Western South Carolina Gem and Mineral Society, Greenville, South Caro-

lina, had the privilege, in February, of hearing a talk by Mr. W. R. Loudermilk about mining operations in Karachi, Pakistan. Although galena is the chief product of the mines, several other minerals are obtained as well. Mr. Loudermilk showed slides and exhibited examples of Pakistani handicraft to round out a most interesting program. Several members arranged special exhibits in their own homes in March. The W. L. Durhams exhibited their son's rocks and Mr. Durham's silvercraft. Sgt. and Mrs. George Bradley showed the rock collection they have dug up in all parts of the world, including from the South Pole. Because it needs more space for its growing membership the club has changed its meeting place to the YMCA building and for the March meeting brought their "Braggin' Rocks" to display and brag about.

The Norfolk Gem and Mineral Association, Norfolk, Virginia, enjoyed talks by two outstanding speakers at their annual banquet in January. First was Dr. Albert Forslev of the College of William and Mary who spoke on Death Valley and showed colored slides. Then Captain John Sinkankas, USN, spoke on the possibilities of "rockhounding" in the Norfolk area. Lt. Paul Kulka, USN, talked on sedimentary rocks and illustrated his talk with slides at the February meeting. The club members are saving Gold Bond Stamps with which to obtain a 16mm projector.

The Mineralogical Society of Pennsylvania, Doylestown, Pennsylvania, observed its tenth birthday with an all-day celebration. On Saturday, May 13th, 1961, a field trip to the Kibblehouse Quarry in Montgomery County, Pennsylvania, started the festivities which ended with a banquet held at the Spring Mountain House.

The Richmond Gem and Mineral Society, Richmond, Virginia, is paying as it goes with a most ambitious program. Classes are held weekly, with members paying rent for the use of machines. On arrival each member is given a mineral specimen and fined ten cents if he can't identify it. (Most members get obliging-

ly stupid when the rent is due.) Non-rockminded spouses prepare dinners which are served at the club house on meeting and class nights, and thus by one means or another the club grows and prospers. Their enthusiasm is an inspiration to all of us.

The Boston Mineral Club, Boston, Massachusetts, voted on the program they wanted most, and then invited Dr. Cornelius S. Hurlburt, Jr. of Harvard University, to speak to them on "Feldspars".

The Gem and Mineral Society of the Virginia Peninsula, Hampton, Virginia, had an "Experts' Night" program in February, when several of their members made brief talks on their specialties. Micromounts, sphere cutting, faceting and minerals were discussed by adult members and the Junior club members spoke on fossils. In March the club had a booth at the annual Home-and-Hobby show, and for the regular meeting heard a talk by Margaret Israel on "Seashells".

The Gem Cutters Guild of Baltimore, Baltimore, Maryland, held its 11th Gem and Mineral show on May 27, 1961. Like all such events sponsored by this club, this was an outstanding display of lapidary work and hand-made jewelry, mineral collections and fossils. Henry C. Clodi, Jr., was General Chairman but credit goes to all members. The club's entries in the Eastern Federation show in Miami will be chosen from the exhibits shown at the local show.

The Charlotte Rock and Mineral Club, Charlotte, North Carolina, learned more about their state when Professor John Hanahan of Belmont Abbey College spoke on "North Carolina Minerals and their Locations". Putting his information to good use they went to Shelby, and under the direction of Rex Boone, had a good time and good hunting. In March, Mr. H. A. Knight, Jr., of High Point, N. C., who operates the Star Gold Mine at Troy, showed some of his mineral collection and spoke about the ones found in his mine. The club held its first exhibit at the Charlottetown Maul in May. It was a highly successful show, and they hope to make it an annual event.

The Newark Mineralogical Society, Inc., Newark, New Jersey, held its 369th meeting in February when Dr. Curt Seeger, former President of the New York Mineralogical Society, spoke on "Phosphate Minerals". The speaker for the March meeting was Mr. Richard Hauck, former President of the Franklin-Ogdensburg Mineral Society, who spoke on "Franklin Today", covering on all aspects of the present situation there, and stated that there is a possibility of the Stirling Hill mine being opened again. The March field trip, lead by George Venturini, was made to the Chimney Rock Quarry.

THANK YOU, ONE AN ALL!

In addition to the seven new clubs, we have news from twenty-eight others in this issue, and we thank all secretaries, bulletin editors and publicity chairmen who have remembered to send us their news. We regret very much that we can seldom give publicity about your coming events, as such events are usually past events by the time you get the magazine. For instance, the issue you are now reading had to be prepared in April. So if you wish to publicize your coming show, please get your notice to us at least four months before the date you are planning for.

Please send your news to Margaret Israel, 136 Hampton Roads Ave., Hampton, Virginia.

GOING TO MIAMI IN AUGUST?

Full fledged Rock Hound at 12!

Editor R&M:-

I began collecting rocks and minerals at the age of eight. Today I can honestly say that I'm a full fledged Rock Hound. Now I am twelve and possess a mighty fine collection if I do say it myself. Personally a fine collection isn't everything. I think the root to a successful collection is your wonderful magazine, "Rocks and Minerals".

I would like to obtain a list of outstanding mineral localities in a radius of about 150 miles from New York City.

Steven Berman
184 Beach 139th Street
Belle Harbor 94, N. Y.

The answer to your problem is Manchester's "Minerals of New York City and its Environs" which lists and describes minerals and mineral localities within a radius of 50 miles of New York City. A map and many fine photos are an added attraction of the book. Unfortunately the book is out of print but your public library may have a copy in its file or it may tell you of the nearest library which may have the book.

Club and Society Notes

EAST

Syracuse Gem & Mineral Club

The Syracuse Gem & Mineral Club held its 10th Anniversary Meeting in Lyman Hall, Syracuse University, Syracuse, N. Y. President Waddell opened the meeting: Miss Elizabeth Henes gave a brief history of the first meeting held on March 14, 1951 with 7 in attendance—Dr. Apfel, Mr. Nhare, Mr. Henes, Miss Henes, Miss Pendrey, Mr. & Mrs. Sylvester. Mr. Sylvester was elected President and Miss Pendrey, Secretary. On the 1st Anniversary the club had 20 members, now on the 10th Anniversary it has 67 members. Four members of the original group were present at the 10th Anniversary Meeting—Dr. Apfel, Mr. Henes, Miss Henes, and Mr. Sylvester.

Dr. Chute gave a nice talk at the 10th Anniversary Meeting on "Knowing your Minerals in this Locality." Dr. Apfel gave a short talk and stated it would be nice if the club would put on an exhibit at the N. Y. State Fair this fall.

A door prize was given by Mr. Sylvester—a rubellite tourmaline from Black Mountain, Rumford, Maine, which he had collected in 1951. Mr. Norris, the Club's Vice-President, was the winner. The club ladies served luncheon after the meeting.

At the May 12, 1961 meeting, a distinguished mineralogist is scheduled to be the speaker. He is Mr. David E. Jensen, Head of the Geology Division of Ward's Natural Science Est., Inc., Rochester, N. Y. Mr. Jensen will show colored slides taken last year on his trip to Europe.

R. L. Sylvester
145 Crestview Drive
Syracuse 7, N. Y.

Brooklyn Mineralogical Society

The Brooklyn Mineralogical Society had an exhibit at the Kings Highway Branch of the Brooklyn Public Library last March. The Committee had worked very hard choosing the most interesting specimens. Einer Whalen, our past President, contributed some interesting specimens from his marvelous collection as did many of our other members.

The exhibit was a huge success. They asked us for an extension of a month but this could not be granted as the exhibit was prom-

ised for the New Utrecht Library (it will be returned to Kings Highway in November). As a result of the exhibit, Kings Highway had to send to other branches for more books on rocks and minerals.

Joan Ericksen, Sec.
Brooklyn Mineralogical Society
8002-19th Ave.
Brooklyn 14, N.Y.

Mohawk Valley Geological Society

After a summer recess, regular meetings were resumed.

On Oct. 15, Tom Wellman and Doug Spring told about their trip to the Bancroft area. At the next meeting a talk by Bill Stone, student of geology at Hamilton College, on his association and experiences with the Adirondack Development Co. exploring for wollastonite.

A field trip to Middleville, N.Y., for quartz xls resulted in some very good finds of the lustrous xls. This is a newly opened locality and a fee is charged.

Dr. Donald Potter, Associate Professor of geology at Hamilton College, was persuaded once again by Alvin Snyder, our President, to act as speaker on Jan. 14th. His topic was "Origin of Minerals."

Adrian Labuz
12 Sherrill Lane
New Hartford, N. Y.

Whiteface Rock & Mineral Club

We are planning to organize a mineral club here in Lake Placid. We have had one meeting, March 19, 1961, and selected the name of the club—Whiteface Rock & Mineral Club.

We would be interested in anyone, anywhere, writing us about membership. We have loads of good collecting areas here for minerals, both specimens and gemstones.

Membership is open to all interested in minerals. Dues are \$1.00 a year.

Buell Abbey
424 Main St.
Lake Placid, N. Y.

Stamford Museum Mineralogical Society

Field trips have been, obviously, out-of-the-question for the snowbound Stamford Museum Mineralogical Society. However, many members have enjoyed pictures and specimens collected during the especially interesting trip to Summit, N. J. in warmer, drier weather.

Through the generosity of the Houdaille Construction Materials Company, the Club was able to visit their trap quarry in Summit, New Jersey. Everyone enjoyed the trip and quite a few minerals were collected. Among these were round, brass-yellow chalcopyrite tetrahedrons as single crystals and in groups; very sharp, clear heulandites scattered on matrix; small octahedrons of galena; and pink crusts of extremely minute chabazites. Also collected were ordinary and amethystine quartz, crusts of pale green, tiny datolite crystals and some prehnite, and some interesting calcite crystals.

The February meeting was of particular interest. Dr. Carleton B. Moore spoke on the "Mineralogy of Meteorites. Dr. Moore is professor of geology at Wesleyan University in Middletown and is associated with the State Geological and Natural History Survey. His talk was concerned with a description of the different types of meteorites and the minerals found in them, these minerals having many different and interesting properties. Because meteorites are our only samples of extraterrestrial material, they are of great interest in indicating something about the composition of our solar system and outerspace. Since meteorites may represent the remnants of a disintegrated planet, they give us an indication of the possible internal make-up of our own earth. Dr. Moore illustrated his most-interesting talk with slides and numerous samples which were thoroughly examined. The meeting was held in the auditorium of the Museum's new Observatory Building.

Visiting collectors are always welcome at our meetings held at the Stamford Museum and Nature Center, High Ridge and Scofield-town Roads, Stamford, Connecticut, at 8 p.m. the second Tuesday of each month, including the summer months.

Mrs. James B. Fullman
Publicity Chairman

Rockhound Roundup in Maine.

July 22 and 23, 1961

The Fifth Annual Rockhound Round-up of the Pine Tree Gem and Mineral Association will be held at the Swift River Valley District School in Roxbury Village, Maine—on Route 17—on Saturday and Sunday, July 22 and 23rd, 1961.

Swapping space and dealer's booths are available, also tenting space. Motels and hotels are nearby.

For further information write to: George Dubois, 27 Granite St., Mexico, Maine.

MID-WEST

Rock, Mineral Study Group Organized in Michigan

A large group from nearby areas met Sunday, March 12, 1961, in Adrian Mich., to organize a rock, mineral and gemstone study group. The speaker was Floyd L. Mortenson of Pontiac, president of the Michigan Mineralogical Society and the Midwest Federation, who illustrated his talk with many interesting and instructive slides. A large display of cabochons and polished slabs was made by Howard Hawn of Pontiac. Several local collectors also had exhibits. Frank Lasky of Tecumseh and Ruth Borradaile of Jasper were appointed temporary chairman and secretary.

Mrs. Arlene Handy
4391 Comfort Rd.
Tecumseh, Mich.

Rib Mountain Gem & Mineral Society

Our Club Members will be sponsoring the Fourth Annual Show of the Rib Mountain Gem & Mineral Society, Inc. on the 23rd and 24th of September, 1961. This Show will be held in the Youth Building at Marathon Park, at Wausau, Wisconsin. As this is a non-competitive show, display exhibits are invited.

Dealers inquiries are requested. Anyone interested should contact the Show Chairman for further information. His address is:

Ron Hoffmann
933 South Fifth Avenue
Wausau, Wisconsin

We would certainly appreciate it if you could put this advance notice in your publication, so that anyone who wants to make plans to include this date on their calendar can do so.

Jeanette Zochert
Secretary
1820 Fairmont St.
Wausau, Wisc.

NEW CLUB IN WISCONSIN

Twenty-two enthusiastic rockhounds have joined to form the *Chippewa Valley Gem and Mineral Society*, with Lyle De Rusha as President and Mary Nauman, Chippewa Falls, as Secretary. Meetings are held on the first Tuesday of the month in a room in the Parks and Recreation Department in Eau Claire. For the present most members are collecting and learning to identify rocks, but lapidary work will follow. The March meeting included a "Brag Night", with the proud owners displaying their prize finds, identifying them and pin-pointing the locale from which they came.

WINTER FIELD TRIP DE LUXE!

Des Plaines Valley Geological Society had a most unusual field trip in January, when deep snow was on the ground and temperatures close to zero in the Chicago area! Field trip Chairman Paul Duncan chartered a bus, and 31 "hardy" members signed up for a trip to ... rock shops! It was a wonderful, day long trip, covering a total of over eighty miles, to four rock shops, and one of the area "gourmet" restaurants for lunch. All stops were scheduled and timed.

Via Chicago's new toll roads, we left Des Plaines, Ill., at nine on Saturday morning, January 28th, and went south to Oak Lawn, Ill., where we visited Rubey's Rock Shop, and were served wonderful coffecake, cookies and coffee, while we inspected Mike Rubey's sphere-making equipment, sphere collection, together with other fine equipment, and a wonderful display of cutting and specimen material.

Next to Lu's Rock Shop in Beverly Hills, Ill., where again we saw a fine display of working equipment, and cutting and specimen material. Impressive were prize winning displays of lapidary work of both Lu and Mrs. Statkus, as well as a long wall mural indicating Lucille Statkus' ability as a painter. We were served cake and coffee!

Then to the toll road again, and to the famous Spinning Wheel Restaurant in Hinsdale, where two long tables were reserved for us, luncheon ordered and ready to serve upon our arrival, to conserve precious time for our browsing in the rock shops. The lunch was delicious, and enjoyed by all.

Then, by our new Congress Expressway, down to the Chicago Loop, and Tom Roberts Rock Shop, where Mr. and Mrs. Ray Mitchell were our gracious hosts, and distributed Carborundum stones, booklets and dop sticks as souvenirs. Again we saw a fascinating display of equipment and cutting and specimen material.

Finally, north to Wilmette, Ill., where we visited the well-known Rogmor Lapidary Supply of Roger and Morilla Wilson. They have a really fabulous display of all sorts of materials books, and cutting and specimen material. We could hardly tear ourselves away ... clutching souvenir crystals ... and in fact, at last ran over our schedule, reaching Des Plaines again at 5:30 P.M.!

At each stop, when we had piled into the bus again, we compared purchases and swapped stories, and all agreed it was a highly successful trip ... and one to be repeated next winter.

Mrs. F. M. Swan
322 Harvey
Des Plaines, Ill.

GREATER KANSAS CITY CLUBS

Five clubs, some in Missouri and the others in Kansas, make up the Greater Kansas City group. *The Heart of American Geology Club*, Kansas City, Missouri, meets on the third Thursday of the month at the University of Kansas City. Although begun chiefly for the purpose of studying geology and mineral identification the club has branched out to include all the many facets of the mineral hobby. President for 1961 is Mrs. Margaret Taylor, and Mrs. Pearl Davis, 2409 E. 58th St., Kansas City, Mo., is Secretary. The club is affiliated with the Rocky Mountain Federation. *The Independence Gem and Mineral Society*, Independence, Mo., meets at the Jackson County Library on the last Tuesday of the month. Sam Pierce is President and Charles M. Baker, 2838 N. Bethany St., Kansas City, Kansas, is Secretary. The February meeting took the form of a covered dish supper, followed by a Little Show, in which amethysts, fluorescents and unidentified specimens were displayed, the latter to be determined, if possible, by the group. *The Kansas City Lapidary Club*, Kansas City, Mo., was organized to meet the needs and interests of those particularly interested in lapidary work. Regular meetings are held on the second Monday of the month at the AAA building, but classes in lapidary are conducted at the Kansas City Museum. The President is Jim Harris and the Secretary, Helen Eklof, 3519 Tracy Ave., Kansas City, Mo. These latter two clubs belong to the Mid-West Federation. At present unaffiliated, but soon to join the Mid-west, is the *Shawnee-Mission Gem and Mineral Society*, Prairie Village, Kansas, just south of Kansas City. Meetings are held at the Shawnee-Mission High School on the last Thursday of the month. W. W. Beasley is President, Roger Wingert, Secretary. The February meeting included showing of a film on "Indians of Early America" and a display and discussion on "Concretions". An affiliate of the Rocky Mountain Federation is the *Show-me Rock-hounds Association*, Kansas City, Mo., which meets on the third Tuesday of the month at the Kansas City Museum. Hollis J. Gordon is President and the Secretary is Mildred Parsons, 1006 E. 21st Ave., Kansas City, Mo. One of their members, Frank C. Greene, has just returned from Iran where he was employed as superintendent on a well-drilling project. The wells were dug through solid rock, but nothing worth slabbing and polishing. How frustrating for a rockhound!

DES MOINES

'62

WYOMING

NATRONA COUNTY ROCKHOUND CLUB

1765 W. 75th St., Casper, Wyo.

Greetings from the Headquarters
of the

Rocky Mountain Federation Show

June 9, 10 and 11, 1961

This show will not be "Just a Little Bit Better", it must be "Just the Very Best Ever". We extend to all a very cordial invitation to be here in June to enjoy it with us.

Field Trips planned during and after the show are:

Saturday, June 10th—To Shirley Basin, Wyo. for Agate, Jade, Agatized Wood and Artifacts
Sunday, June 11th—Lander, Wyo., area for Jade and Sweetwater Agate.

Monday, June 12th—To Farson, Wyo., for Jade, Eden Valley Wood and Artifacts.

The Greybull Rockologist Show will be on May 19, 20 and 21st, sponsored by the Greybull, Wyoming, Chamber of Commerce. The dealer and exhibitor spaces free of charge.

The Wyoming State Mineral and Gem Show will be on June 2, 3 and 4, in Rock Springs, Wyoming. Then our show on June 9, 10 and 11.

Wyoming State Show at Rock Springs, Wyoming June 2, 3, 4, 1961

Plans for the State Show are well under way. Many of the members are busy getting all the preliminary work done. The dealer

space has been contracted and allotted. The local members are planning their individual displays and we hope the state clubs are lining up material to fill the space allowed for exhibits, displaying beautiful specimens of their own handiwork.

Programs for each evening of the show and a get-together on Thursday night prior to the opening are features being planned by the program committee. Also door prizes are to be given each day.

Among the special attractions will be a full size fire place and a coffee table made by Ernest Fedel, a member of the Rock Springs Club. A lot of time went into the making of each of these beauties—the selecting, cutting, polishing, placing and framework took a lot of time and patience as well as knowledge of the material he was working with.

Another attraction will be a display of Jade—beautiful, cool and lustrous Wyoming nephrite Jade. Many never tire of admiring the carvings, cabochons, polished slabs and boulders—large or small. We also hope to procure a display of Utah Geodes.

Something which has nothing to do with rocks but which many rock-hounds do enjoy will be a Square Dance Festival going on during the Rock Show dates.

We hope to see you at the show and on the rock trips planned for those interested in going to Eden Valley or the Turritella Beds.

ROCK SPRINGS GEM AND MINERAL CLUB, host for the WYOMING STATE MINERAL AND GEM SHOW—JUNE 2-4, 1961.

Mrs. Hans J. Peterson, secretary
81 Pine
Rock Springs, Wyoming

COLORADO COLLEGE MUSEUM ADDS GOLD COLLECTION

By RICHARD M. PEARL

The A. E. Carlton Collection, numbering more than sixty choice specimens of Cripple Creek gold ores, has been cleaned, sorted, and transferred to a new glass-enclosed cabinet at the Colorado College Museum in Palmer Hall, Colorado Springs, Colo., it is announced by the curator, Dorothy Mierow. The museum is open to the public weekdays 8 a.m. to noon and 1 to 4:30 p.m. with no charge for admission.

These ores include wire silver and an occasional copper mineral, in addition to the specimens of such important gold-bearing minerals as calaverite, sylvanite, and native gold.

They are contained in phonolite (a

volcanic rock), the Pikes Peak granite, and several metamorphic rocks, and they show the typical associations such as fluorite and stibnite.

The mines represented include the Cresson, Elkton, Mary McKinney, Strong, Pharmacist, and others famous in the exciting history of Cripple Creek, Colo., one of the great gold camps of the world.

A. E. Carlton was active in the mining developments of Cripple Creek and the milling of ore at Colorado City, and was president of several national banks. The Carlton Mill between Cripple Creek and Victor is named after him, as is the Carlton Tunnel which drains deep mines at Cripple Creek.

Publications Recently Received

Andrews-Studies in Paleobotany.

By Henry N. Andrews, Jr., Professor of Botany, Washington University, St. Louis, Mo., 487 pp., illus. Published by John Wiley & Sons, Inc., 440 Park Ave. So., New York 16, N. Y.Price \$11.75.

In this introductory textbook the author has sought to convey a thorough understanding of the vegetation of past ages. The primary theme projected in the book is the evolution of vascular plants from the time that they first appeared on land, focussing on fossil groups that have a bearing on the origin of modern ones. Although dealing principally with the fossil record, Professor Andrews has introduced occasional discussions of related living groups. The literature in the field and studies of fossil plant collections in this country and Europe are frequently cited. The most significant information of the past as well as the most recent discoveries are recognized and reviewed.

Studies in Paleobotany abounds in illustrations (many completely new) which are especially important in a subject where there is a frequent lack of any living plants for comparison with those of previous eras. The book includes only a minimum of detailed technical classification.

THE SOUTHEASTERN NEW HAMPSHIRE MINERAL CLUB YEAR BOOK

The second Year Book of the Southeastern New Hampshire Mineral Club is in the hands of interested collectors.

An Honorary Member, Mrs. James M. Dearborn, Vice-President of the Eastern Federation, has contributed a fine article on fluorescence, a special feature of which is the list of the fluorescent minerals of New England and their localities. Mrs. Dearborn has also interpolated several interesting paragraphs throughout the book.

Virginia Coyle writes the results of her absorbing studies of Pegmatite Mines in Southeastern New Hampshire.

Clayton Ford, who seems to have done more serious collecting than the average "rock-cracker", has contributed descriptions of his finds of rare phosphates in the state.

Our erudite Past President, Phillip Foster, came up with a paper on the amazing number of chemical elements found in Dover, N.H. area minerals—and he can produce proof of every one! Not only is Mr. Foster a trustee of Dover's Museum, the Woodman Institute,

but he has a marvelous collection of more than 3,000 micro-mounts, some of which Club members were once privileged to view through the microscopes in the Laboratory of the University of New Hampshire.

Bart Kelly, still on the quest for topaz, relates his interesting summer's rock-hounding. Bart usually has assistance from four extremely sharp-eyed "pebble pups", growing right up imbued with the true mineral sense; in fact his daughter, Susie, has written our Pebble Pup Page.

Our President, Robert Y. Stiles, a "Thinking Rockhound", adjures us to attempt some serious prospecting, rather than to be always content with the casual visit to familiar and well-examined areas.

Roy Heinse's story of the rare eucryptite, which fluoresces "begonia-rose", will be of great interest to all collectors. His study of the historical details of its long concealment adds still more fascination. And the final article, "The Great Book and Our Hobby", also by Mr. Heinse, reveals that the Bible steadfastly offers wide and interesting research, even apart from its religious aspects. Many hours must have been required to assemble this list, and what's more—think it over!—many pages must have been read.

Evelyn B. Blake, Secretary
Kittery Point, Maine

Dealers Catalogs:

Covington Lapidary Eng. Corp.

Redlands, Calif., has recently released their new catalog #6103, well illustrated, 18 pages. A letter from Jack R. Cox, Advertising Manager for Covington, reads:

"The important thing about this catalog is that it shows a line with new items and new convenient features, but IT IS NOT A PRICE INCREASE CATALOG. In fact, a few units have been lowered in price. Our business has increased to the point that production has been larger and production costs cut. The savings we are passing on to the consumer.

"Some new items and new features are found on pages 10 and 11. The #421 and #410 Combination Units have been remodeled and improved without any price increase. The shorty units found on these pages are new. Another new unit is the sphere cutter featured on page 16."

MK DIAMOND PRODUCTS APPOINTS PRODUCTION MANAGER

Webb Morrow, General Manager, MK DIAMOND Products, Musto-Keenan Company, Los Angeles manufacturer of diamond blades, recently announced the appointment of Albert H. Allen Jr. as Production Manager.

Allen holds a B.E. degree from the University of Southern California. He has been Chief Industrial Engineer for Rheem Manufacturing Company in South Gate, California where he had responsibility for plant layout, estimating, incentive standards, planning, value analysis and suggestion programs. He has been a Senior Industrial Engineer for Hughes Aircraft Company, El Segundo, California, Kwikset Locks Incorporated, Anaheim, California, Latchford Glass Company, and Wilco Company, Los Angeles. As an electronics instructor in the U. S. Navy, Allen has seen duty in World II and the Korean War and received an

honorable discharge in 1952. He is married and the father of three children. Bringing a wealth of experience to MK DIAMOND, Allen will assume major responsibility for plant layout, production planning and production improvement activities.

In making the appointment, Morrow stated, "The addition of Albert Allen to our team, is in line with our policy of providing the best diamond blades at the lowest possible cost. Sound manufacturing methods, processes and procedures will continue to be developed, with Allen's supervision, to provide industry with better, longer lasting, more efficient and economical tools."

Musto-Keenan Company, 1801 South Soto Street, Los Angeles, Calif., is one of the country's largest manufacturers of diamond blades and other tools.



Albert H. Allen, Production Manager for MK Diamond Products.

WITH OUR ADVERTISERS

Conducted by James N. Bourne

c/o Rocks and Minerals. Box 29

Peekskill, N. Y.

Advertisers are cordially invited to submit News Items to this Department

Winston Gold of Globe Minerals, 163-03 Depot Road, Flushing 58, N.Y., brings the following to our attention:

"I am pleased to announce that two of New York's largest dealers and importers of Brazilian minerals have duly commissioned me to act as their sales representative. They are both old hands in the field of Minerals and Gems and will have exceptionally fine deals for dealers and manufacturers.

"From time to time we shall also have available unusual and unique specimens and groups that will have special appeal to the museum, advanced collector, manufacturer and decorator. I plan to continue my retail operations, this new venture notwithstanding, so my old friends can continue to visit me as usual. I have been operating the shop full time every day since last August when I retired from my daytime engineering job."

Note: Globe Minerals ads may be noted through the pages of R&M each issue.

The Brauns of Ridgefield, Conn., report they have been very fortunate in their search for unusual and hard to get mineral specimens as per their recent western trip this past winter that included Arizona. The Brauns returned home last month.

Mrs. Braun reports: "We have obtained about 80 different xl mineral specimens in sizes from thumbnail to cabinet size. We have decided to sell sets in trays consisting of 12 individual minerals each in a box $1\frac{1}{2} \times 1\frac{1}{2}$.

"The first set will have the basic minerals, and the second, third, and fourth sets will each be more advanced

with no duplicates in the four sets. We welcome visitors and friends who like to see outstanding material. We also have obtained some choice cutting rock and slabs for polishing."

From Sergio Del Fava, Astro Lapidary Co., 611 Broadway, New York 12, N.Y., comes a note to readers: "We have a new catalog showing in detail a good quantity of faceted stones and cabs, pearls, baroques all with prices. Anyone interested should drop us a card asking for our Catalog for the Jewelry Craft. Also we are coming out with a catalog showing our rough material and supplies. Anyone that is on our mailing lists will automatically receive copies of the above catalogs."

R. W. Foss, Director of Ossipee Valley Development Association, Inc., Limerick, Maine—welcomes prospectors and collectors to vacation and prospect in the Ossipee Valley this summer.

"We are located in Limerick, Maine, which is approximately 100 miles north of Boston and 30 miles west of Portland, Maine. Among the minerals found in our area," informs Mr. Foss, "are as follows: silver in Acton, bog iron in Shapeleigh, free gold in Waterboro, rose quartz in Limerick, and many others.

"For personal contacts, maps, guidance to collecting areas, and other information write: OVDA., R. W. Foss, Dir., East Hiram, Maine."

We would like to refer readers to some very interesting silver minerals through the ads of John S. Albanese, P.O. Box 221, Union, N. J. Mr. Albanese offers very good material regularly and

these silver minerals would likewise make a fine addition to one's collection. Order or inquire at the above address as to these and other fine mineral specimens and be one of the many satisfied customers of Mr. Albanese. Also inquire as to his book on "Minerals of Franklin and Sterling Hill", N. J.

Yates Donnan of Yates Rock Shop, 52 College Acres Dr., Aiken, S. Carolina, is running an introductory offer via his ad this issue as to 1 lb. Savannah River agate, postpaid for \$1.00. Also free list may be had for the asking.

For those of you who are planning a Maine trip this year, be sure to stop at Echo Lodge on Echo Lake, Fayette, Maine, opportunity prevailing. There you have a family vacation resort which is recommended by the late Duncan Hines.

Facilities included for the family's leisure moments are—Fishing, boating, swimming, hiking, waterskiing, archery, to name a few of the sports that await your participation. For further information write: William Pfaffle, 1125 Rahway Ave., Westfield, N. J., or phone ADams 2-4970.

Samuel John Ciorca, Jr., Empire State Rocks and Minerals, 45 Kron St., Rochester 19, N. Y., is featuring some very fine crystallized mineral specimens from Mina Ojuela, Mapimi, Durango, Mexico through his ad this issue. A few of the minerals offered at low prices which may not be repeated are: Beautiful velvety bluish-green botryoidal crystallized aggregates of rosastite on limonite; sharply crystallized adamite; aurichalcite and three different calcites. Also many others. Send for price list that include other items.

Harry C. Wain of the Mineral Equipment Co., Hampden Road, Somers, Conn., is offering a new exclusive lamp "The Raytech Broad Spectrum Prospector", Model BS-5 at \$24.95.

We quote literature re: to this lamp as follows: "This fluorescent lamp gives off a full amount of brilliant shortwave plus

a copious amount of longwave at the same time. Now you can prospect once and get all the minerals that fluoresce. Efficient for home displays or ordinary house current and unexcelled for field use yet places no more drain on batteries than an ordinary u.v. light. Look up our ads this issue for more details and information."

Harry Sering, 350 South Fenton Ave., Indianapolis, Indiana is offering through his ad this issue a mixture of whole geodes, matching geodes, geode halves and sections. All crystal lined, clean and free of stains and blemishes.

"I also am offering some very nice Indiana calcite, beautiful translucent to transparent butterscotch colored crystals on limestone matrix. Very choice without broken or bruised crystals. The crystal lined geodes or the Indiana calcite will make beautiful additions to your cabinet. I also have many other fine minerals. Send for list."

H & C Green is offering over 80 kinds of imported and domestic rough cutting materials. Tumbled stones, over 60 kinds. Also faceted stones, cut cabochons, findings, mountings, etc. Inquiries as to above and free catalog may be ordered through their ad this issue by writing H & C Green, 812 N. Prairie Avenue, Hawthorne, Calif., or phone Osborne 5-8111.

R. C. Romanella of Commercial Mineral Corp., 22 West 48th St., New York 36, N.Y., is offering some very nice mineral specimens through his ads this issue. A few noted are calcite xl group on xl-ine, from Cumberland, England; diopside, fine small xls on rock, Mexico; pyrite, very fine xl group, Park City, Utah; malachite, pseudo after azurite xls, fine piece, from Ural Mts., USSR.

Their other ad on adjoining page includes a few fine faceted brazilianites of finest quality and excellent cutting. 1st quality stones from 1 to 5 cts. in size @ \$10.00 per ct., larger stones up to 30 cts. ea. Prices on request.

Kona dolomite, the newly found mineral that can be used for excellent sphere making, bookends, cabinet specimens, jewelry, etc. Ideal for lapidarists as the material can be used for making necklaces, bolo ties, pendants, cuff links and other numerous items. Place your order to: Markert & Steele, 107 W. Ridge St., Ishpeming, Mich. Note their ad in our pages this issue as to this very nice material.

A real country Inn set in a delightfully un-commercialized lake and mountain area. A pleasant drive to nearby Oxford County gem deposits for the rockhound awaits you as well as gold panning nearby. Swimming, shuffleboard also available for your convenience. Write: Ruth J. Whitin, Weld Inn & Motel, Box R, Weld, Maine, for additional information and folder.

Louis H. Roth of Radiant Ultra Violet Products, Cambria Heights, N. Y., is now featuring long and short wave Ultra Violet "Lamp Kits" that are easy to assemble with details free relates Mr. Roth. Also nothing else to buy.

For further details—you may write to Louis H. Roth of Cambria Heights,

N. Y., on above lamp kits as well as the many other lamps fully assembled that Mr. Roth has in stock ready for your purchase.

Some very nice fluorescent specimens are available through the ad of Peters Rocks and Minerals, 1316 East Colfax Ave., Denver 18, Colo., that include calcite and zinc—very pretty; calcite and scheelite—calcite (blue) fl. orange; calcite and willemite; scheelite xls on cassiterite and many others. Prompt attention to all orders.

John H. Suther of Suther's, 74 Brumley St., Concord, North Carolina, is offering some very nice blue sapphire—Australia, of good faceting quality at \$5.00 ct. through his ad this issue along with other very good material of the best faceting grade that includes: moonstone—India; fire Opal—Australia; amethyst, deep purple, Brazil; plus sunstone, star ruby, and dark golden beryl, all from India. Send stamped self-addressed envelope for price list of stones or you may send \$1.00 for catalog and deduct this amount from your first order of \$10.00. The Suther's sell only 1-A grade stones and all are guaranteed.

GIFTS TO AMERICAN FEDERATION!

The American Federation of Mineralogical Societies acknowledges receipt of a contribution in the amount of \$100.00 to its National Scholarship Fund, from the Magic Valley Gem and Mineral Society of McAllen, Texas. It is understood that this represents part of the receipts of their 1960 Gem and Mineral Show, and unselfish gifts of this nature indicate and help to establish the "non-profit" status and objectives of our clubs.

An additional contribution in the amount of \$100.00 was received in the name of the "Nicholas Biglin Memorial" and was contributed by fellow-members of his local society, The Gemcrafters of Miami, Fla., in his name.

"Nick", as his friends called him, was a familiar figure at the Eastern Federation shows where his jolly personality and ready willingness to be helpful endeared him to hundreds. What more fitting tribute can be paid to departed members of our clubs than these contributions which will perpetually carry on our educational purposes?

"Nick" passed away suddenly and peacefully on October 8th, 1960 at the age of 73.

Henry B. Graves
Publicity Chairman

HOW TO REPAY A DEBT!

Editor R&M:—

The best way I know to repay a debt to a very good friend and fellow collector is to send him a subscription to "Rocks and Minerals". Would you therefore, please arrange to forward "Rocks and Minerals" for the next year to my friend:

Mr. Ben L. Hunt
1047 South 2nd
Montrose, Colorado

My check to cover is enclosed.

Mr. Hunt, a fine gentleman of some 70 odd years young, visited here last year and took some specimens of New Jersey's rocks and minerals back to Colorado with him. On his return home, he very kindly sent me some 25 specimens of native rocks and minerals for my collection. These included a fine sample of Selenite and several Carnotites.

I am sure Mr. Hunt will enjoy your magazine as much as I do. Perhaps you would suggest to other collectors, in the Montrose, Colorado area, that they contact Mr. Hunt.

Walter W. Marshall
34-B Bruan Place
Clifton, N. J.

March 14, 1961

BIG SAVINGS NOW

up to **33%** off



ROCKHOUNDER'S KNAPSACK

The buy of the year

Tremendous value — this is army surplus material at a low, low price. Made of a sturdy, waterproof khaki canvas. Very well stitched — well made. Perfect to carry rocks, equipment, books, maps, everything you might tote on a Rockhounding trip. Sports men, fishermen, hunters — everybody likes them. They sling easily over your shoulder to carry any kind of load. 11 1/2" x 5" wide x 12" deep — with shoulder strap.

H115-1-K each only \$1.50

Terrific Values on JEWELRY CRAFT and ROCKHOUNDING Supplies!

NEW epoxy ADHESIVE

So good it's replacing rivets
MIRACLE ADHESIVE — you've seen it on T-V and in LIFE — it bonds materials stronger than anything else. Aircraft industry using it instead of Rivets — replaces nails and screws. Perfect for jewelry making — **Unconditionally guaranteed!** Kit of 2 jars with complete instructions.

Order: gn-21-K only \$1.50



This "15x Ruper" Magnifier with any magnifier you now use! Full diameter corrected lens! Nickel plated metal folding frame. Equivalent to other \$6 magnifiers.

Order as: T130-25-K \$1.00

WE DARE YOU TO COMPARE



GOLD PANNING KIT

... exciting fun for the entire family
Everything you need to pan for gold — including directions, 12" gold pan, sample of placer gold ore — ready to pan. Shovel, pouch of ore and an alnico magnet. Shows you how to go about it — just like the old 49'ers did. It's a real thrill . . . and old 49'ers did. Get a kit and head for the open country. Excellent gift item too. Start panning for gold now. Order —

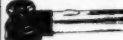
T-72 K-49" Gold Panning Outfit . . 1 for \$2.95

YOU JUST CAN'T GO ROCK HUNTING WITHOUT IT!

ESTWING PROSPECTOR PICK

Forged all-steel one-piece head-handle prospecting pick with the new blue everlasting nylon cushion handle grip — non slip. 13 inches long with 7" head which weighs 22 oz. Guaranteed unbreakable.

Order as: Z-60-K now only \$4.75



FLASHLIGHT MAGNIFIER

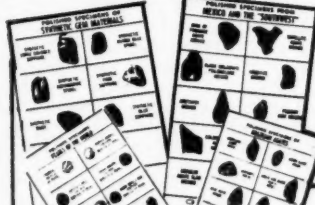
Enlarge Objects 7X

Place "Flash Magnifier" ON object under scrutiny — snap on flashlight — and get 7 times magnification exactly where you need it. Gem stones and minerals look more beautiful. . . markings, flaws, defects are easily spotted. 7" long. Metal and plastic case. Colossal value.

Z-179 K only \$1.95

Complete including 2 batteries . . .

Z-180 K. only \$2.15



SPARKLING — SUPERB SPECIMEN CARDS!

10 different specimens on card — all tumbled and polished — many of gem quality!

Wonderful cards for everyone interested in rockhounding. Educational — instructive — good for class work — and an "absolute must" for the beginning collector.

Big value . . . terrific buy — order one or more now — you must see them to appreciate . . . we guarantee you'll be delighted!

- YZ-101 K "Mexico and the Southwest" . . . only \$1.00
- YZ-102 K "Brazilian Agates" only \$1.00
- YZ-103 K "Mother of Pearl" only \$1.00
- YZ-183 K "Brazilian Gem Materials" . . . only \$1.00
- YZ-184 K "Gem Materials of the West" . . . only \$1.00
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- YZ-186 K "International Gem Stones" . . . only \$1.00
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TERRIFIC VALUES IN READER MAGNIFIERS



Imported quality — 2x magnification — optical lens. Ideal for jewelry making, rockhounding, stamp collecting, etc. Fits easily in pocket. Black Ebonite handle — polished chrome frame.

Z-181 K 2" Magnifier . . . each \$1.00

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Designed for All Professionals and Trades
Make all precision work easier work

- T121-3K MAGNI-FOCUSER, magnifies 1 1/2 times at 14" \$40.50
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Leaves both hands free to work
Any work that requires precision can be done easier, faster and more accurately with a Magni-Focuser — the binocular magnifier.
Magni-Focuser shows an object in third dimension and greatly magnified — with the depth and clarity of normal vision. It reduces eye-strain and prevents eye-aching — thereby saving time, increasing accuracy, and minimizing the chances of errors and accidents.

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GRIEGER'S 1633 E. WALNUT PASADENA, CALIF.
Prices include Taxes and Postage!

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Announces its

***75th Anniversary
Dinner Meeting***

To Be Held At

The Faculty Club, Columbia University

400 West 117th St., (Morningside Drive)

New York City, N. Y.

on

Thursday, November 16, 1961

Reception at 6 P.M., Dinner at 7 P.M.

Members of associated organizations are invited to participate in this gala celebration. A select program is planned.

Subscription, per person, all inclusive, \$4.75, Informal.

Reservations to the treasurer,
Carl Krotki
250 W. 57 St.
New York 19, N.Y.

Neal Yedlin, President
129 Englewood Drive
New Haven, Conn.

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of

SPRUCE PINE, NORTH CAROLINA

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AUGUST 2, 3, 4, 5, 1961

at the Harris High School

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For complete Program and Lodging Information please write to

MINERAL AND GEM FESTIVAL

Spruce Pine, N. C.

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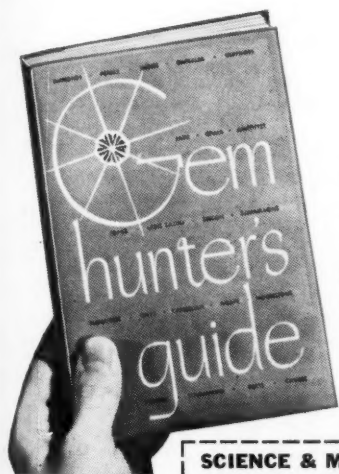
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1034 ACTIVE GEM MINERAL LOCATIONS verified and confirmed by regional experts or personal exploration. This is the most comprehensive, detailed listing of North American gem locations available to the hobbyist—or specialist.

81 MAPS OF HARD-TO-FIND AREAS, the largest group of such pin-point accuracy maps ever published.

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For 5 Days**

**SEND
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Please send me—for 5 days' FREE EXAMINATION—a copy of the "Gem Hunter's Guide" packed with pictures, maps, charts, expert advice telling where gems may be found. Unless completely satisfied with the book at the end of 5 days' examination, I may return it and owe nothing. Otherwise, I will keep it and send you \$3.95, plus 50c to cover postage and handling charges.

Name

Address

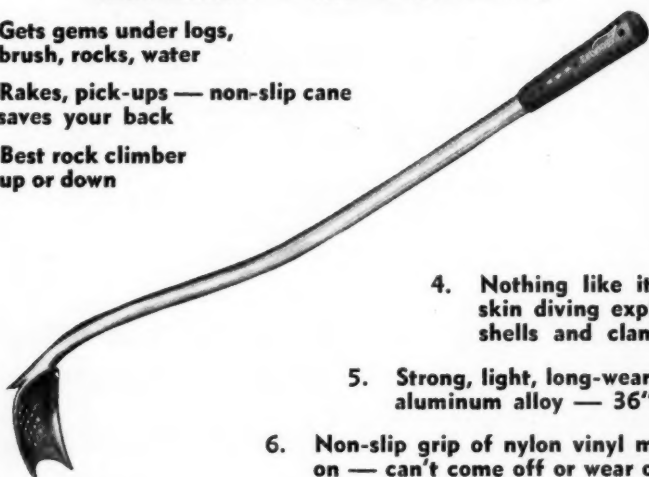
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☐ Save 50c postage and handling charges... by enclosing only \$3.95 WITH this coupon. Then WE will prepay ALL delivery charges. Return book within 5 days for full refund if not completely satisfied.

New **AMAZING** **Estwing** **Gem Scoop**

for Geologists, Gem, Shell, and Clam Hunters
Skin Divers — The Whole Family

1. Gets gems under logs, brush, rocks, water
2. Rakes, pick-ups — non-slip cane saves your back
3. Best rock climber up or down



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5. Strong, light, long-wearing aluminum alloy — 36" long
6. Non-slip grip of nylon vinyl molded on — can't come off or wear out

#EGS \$7.50

Makes Gem Finding Easier - More Fun

New

Estwing **ROCK CHISELS**



No. ERC8 1 1/4" x 8"\$1.50
For splitting



No. ERC12 1/2" x 12"\$1.35
For pockets

Vinyl Grip — Shock Proof

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Made by the Inventors and World's Only Specialists of Unbreakable Tools

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Rockford, Ill.

SCOTT WILLIAMS
Mineral Company, INC.

BULLETIN

440 N. SCOTTSDALE ROAD - SCOTTSDALE, ARIZONA, U.S.A. - Whitney 5-0803

NATIVE ELEMENTS

NATIVE ANTIMONY

Arechuybo, Chihuahua, Mexico

Brilliant tin-white metallic crystalline aggregates. These specimens occur in small to large nodules imbedded in a white clay bank close to the surface. All of the specimens are nearly-pure native antimony with a white to yellow oxide rind. Some of the oxide minerals in association are Stibiconite, Valentinite and Kermesite. $\frac{1}{2}$ " to 1" \$.25 and .50. 1 x 1 to 1 x $1\frac{1}{2}$ \$.75, 1.00 and 1.25. $1\frac{1}{2}$ x $1\frac{1}{2}$ to $2\frac{1}{2}$ \$1.50 and 2.00. 2 x 2 to 2 x $2\frac{1}{2}$ \$2.50, 3.00 and 3.50. 2 x 3 to 3 x 3 \$4.50, 5.00 and 6.50. 3 x 4 to 4 x 4 \$7.50, 8.50, 9.50 and 10.00. 4 x 5 to 4 x 6 \$12.50 and 15.00.

DIAMOND CRYSTAL

Premier Mine, Kimberly, Union of South Africa

Beautiful, sparkling transparent colorless to tinted single crystals. The average size of the crystals is $1/16$ ". Superb for micromounters. Many crystals have interesting inclusions of other minerals. The crystals occur in octahedrons, dodecahedrons and various combinations and modifying forms. $1/16$ " Crystal for \$1.00. Fluorescent green, blue or yellow diamonds at \$2.00 each.

NATIVE SELENIUM

Homestake Mine, Sec. 23, Ambrosia Lakes District
Near Grants, Valencia Co., New Mexico

Very rare native element previously reported from but three localities. The mineral occurs as bluish to deep reddish-black prismatic microscopic crystals coating sandstone. All of our specimens exhibit enough selenium to be visible to the eye. Every specimen will produce fine micromount material. 1" to 1x1 \$1.00, 1.50 and 2.50. $1x1\frac{1}{2}$ to $1\frac{1}{2}x2$ \$2.00, 2.50, 3.50 and 5.00. $2x2$ to $2x3$ \$3.50, 4.00, 5.00, 6.50 and 7.50. $3x3$ to $3x5$ \$7.50, 8.50, 9.50, 12.50 and 15.00. $4x5$ to $4x6$ \$17.50 and 25.00.

TERRESTRIAL NATIVE IRON

Uifak, Disko Island, Greenland

Veinlets and masses of a bronze metallic color disseminated in basalt. The native iron has been found in large masses up to 20 tons in the basalt off the shore islands of Greenland. It was used by the inhabitants of Greenland for knives and utensils and was known as early as 1819. It was at first thought to be of meteoric origin, but its terrestrial nature has been proven. The action of the intruded basalt upon the carbonaceous shales has reduced the silicates in the basalt to native iron. $\frac{1}{2}$ " to 1" \$.50 and 1.00. $1x1$ to $1\frac{1}{2}x2$ \$1.50, 2.00 and 2.50. $2x2$ to $2x3$ \$3.50, 4.50, 5.00 and 7.50. $2\frac{1}{2}x3\frac{1}{2}$ to $4x4$ \$8.50, 9.50, 10.00, 12.50. $4x5$ to $4x6$ \$15.00, 17.50 and 25.00.

NATIVE ARSENIC

Burraton Combe Quarry, St. Stephens-By-Saltash, Cornwall, England

Pure gray crystalline semi-botryoidal mass, tin-white metallic on fresh surface. This is a most unusual occurrence since the native element was not found in association with other minerals. 1" to 1x1 \$.50 and 1.00. $1x1\frac{1}{2}$ to $1\frac{1}{2}x2\frac{1}{2}$ \$1.50, 2.00, 2.50, 3.50, 4.50 and 5.00. $2x2$ to $2x2\frac{1}{2}$ \$.65 and 7.50.

ADD TO YOUR NATIVE ELEMENT COLLECTION BY ORDERING TODAY.

SATISFACTION GUARANTEED

The ORIGINAL SUPER DISPLAY LAMP

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SUPPLIERS



RAYTECH SUPER

\$59.50

model SW-18 shortwave
(was \$64.50)

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model LW-18 longwave
(was \$34.50)

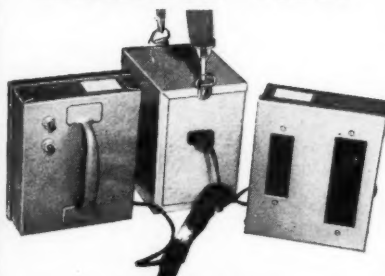
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- POWER**—10 times as much U. V. as most lamps sold
- COVERAGE**—Alzak reflector and 16½" filter give wide brilliance.
- ECONOMY**—More ultraviolet per dollar than any other lamp
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LONGWAVE
SHORTWAVE

LAMP



Raytech Dual

\$29.50

BC-5 BATTERY ADAPTER
with shoulder strap.
(as shown) — \$5.75
Batteries — 45 volt No. 202
per set of two — \$6.50

POWERFUL—Unexcelled in its class

CONVENIENT—Well placed comfortable handle and starters permit one hand operation

LARGE FILTERS—Over 8.4 sq. in.-opening. The largest in its field

SOLID CONSTRUCTION—All metal. No light leaks, rattle or hum

COMPACT—Only 5" x 6½" x 1⅞"

ATTRACTIVE—Handsome, durable 2 coat baked on gray hammertone finish.

Other lamps available—Ask your dealer—Send for Catalog R
Orders: Please include 75¢ with each order for postpaid delivery.

MINERAL EQUIPMENT CO.

HAMPDEN ROAD, SOMERS, CONN.

NEW! EXCLUSIVE!

The Raytech Broad Spectrum Prospector

A FULL AMOUNT OF BRILLIANT SHORTWAVE PLUS A COPIOUS AMOUNT OF LONGWAVE AT THE SAME TIME. NOW YOU CAN PROSPECT ONCE AND GET ALL THE MINERALS THAT FLUORESCES.



Efficient for home displays on ordinary house current. With batteries and BC-5 adapter it is unexcelled for field use, yet places no more drain on batteries than an ordinary u.v. light.

- Alzak reflector.
- Cushioned filter and tube.
- Two coat baked finish.

BROAD SPECTRUM PROSPECTOR
MODEL BS-5 \$24.95

SHORTWAVE PROSPECTOR
MODEL SW-5 \$22.50

SEE PAGE OPPOSITE

MINERAL EQUIPMENT CO. Hampden Rd., Somers, Conn.

Explore Mineral Fields of Maine

Conducted field trips and instruction for the amateur and experienced mineralogist. Led by NEIL WINTRINGHAM, M.S., Geology—prominent mineralogist, lecturer, teacher, and author of "Handbook For A Week With Maine Minerals".

July 29 to August 5th

And for the family's leisure moments . . .

Fishing	Archery	Waterskiing	Art
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(Water in 70's)			& other sports

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Family vacation resort. Recommended by Duncan Hines.
Delicious meals served by waitresses. Daily room maid service.

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6 specimens (Including Pol. Spec) \$5.00 value
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Please. Price List on Request 10c
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"GUARANTEED SATISFACTION FOR OVER
25 YEARS"

SET OF MEXICAN MINERALS

A colorful assortment of xls and xl groups plus a FIRE OPAL; there are 18 quality specimens averaging 1" and they normally sell for 35¢ to 50¢ each. Wulfenite, vanadinite, austinite, rosasite, etc. included. This set packed in a handsome Sumner compartmented wooden box (worth \$3.00) and sent postpaid for only \$8.50.

201 San Francisco

Santa Fe, N. M.

**The Prospectors
Shop**



GOING WEST?

Come in and we will help you select the equipment you need for your purpose and ship to you factory direct if you can't take it with you. We can supply you with the best in lapidary equipment, supplies, mountings, and findings. Cutting material and mineral specimens from all parts of the globe. Finished stones and jewelry, all of the better books and guides. Custom cutting and mounting.

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BAYFIELD 11,

On Good Highway 160 in Southwest Colorado, 18 miles East of Durango
LOTTIE SHIPLEY ROHDE

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Plan NOW to attend the

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1961

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NATIONAL GEM & MINERAL SHOW

And Combined Convention of

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GEMCRAFTERS OF MIAMI

Box 42-616

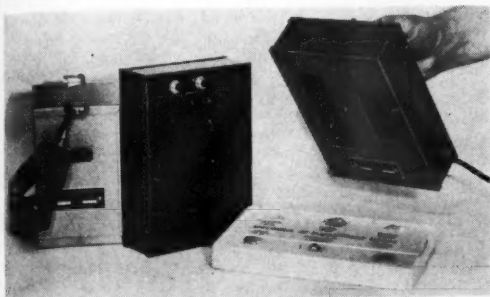
Miami, Florida

Tiger Eye Twin

LONG AND SHORT WAVE ULTRA-VIOLET UNIT

Tiger Eye Twin model 25-36 shown with
Battery Case model BA-245

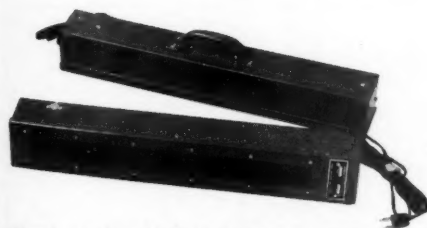
ONLY
\$29.75



The TIGER EYE TWIN, when equipped with the Battery Adapter Case model BA-245 (optional-\$5.75) and two 45 volt #202 "B" batteries (optional-\$3.50 each) can be carried right into the field to give you on-the-spot information about the minerals you discover.

- Most powerful for the price . . . anywhere
- Based on the latest engineering principles
- Combines long and short wave in one unit
- Rugged all metal housing
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- Completely portable for field prospecting (with BA-245 case)
- Operates on house current or batteries
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- Light weight . . . only 1 lb. 15 ozs.
- Compact . . . only 5 1/2" x 2" x 8 1/2"
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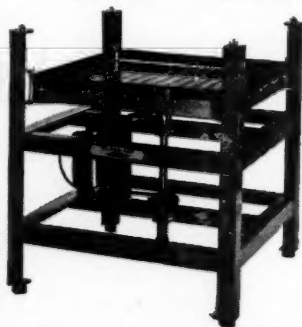
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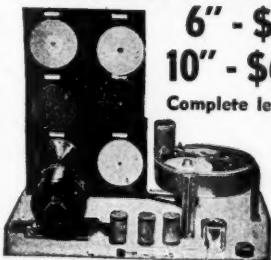
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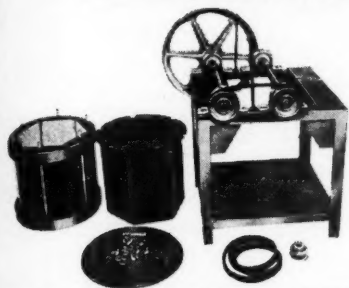
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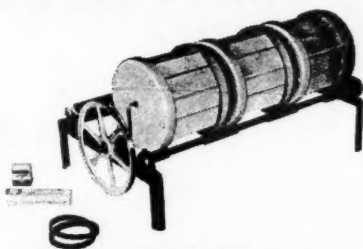
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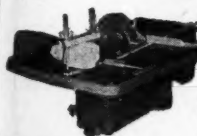
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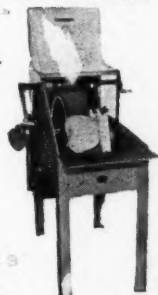
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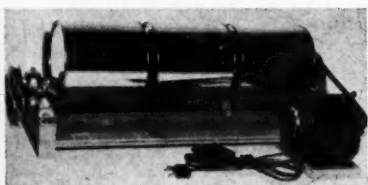
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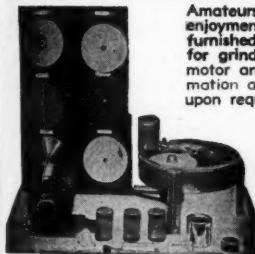
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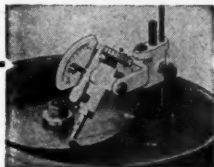


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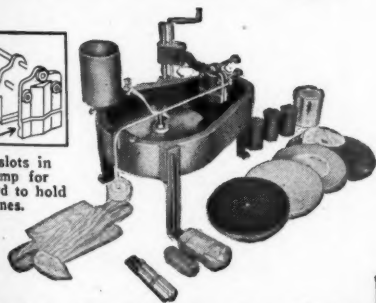
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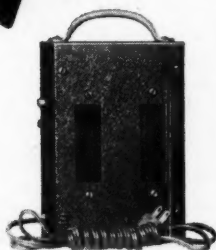
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Under the heading "Miscellaneous" in the Jan-Feb 1961 issue P. 101. Be sure to come see us when in Florida. Siemer's Rock & Mineral Museum and Gift Shop, Highway U.S. 41, "Tamiami Trail", Bradenton, Florida.

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MISCELLANEOUS

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Atlantic City

August 26, 27, 1961

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Mrs. Leonard W. Anderson, 4703 Thistle St., Seattle 17, Wash. (sands from Washington and Oregon).

Willard Olson, Route 1, Box 3997, New Port Richey, Fla. (Pliocene shells from Everglades and fossil bone).

Owen G. Parsons, R. D. 4, Black St., Amsterdam, N. Y. (hexagonite-wollastonite with fine diopside and garnet xls).

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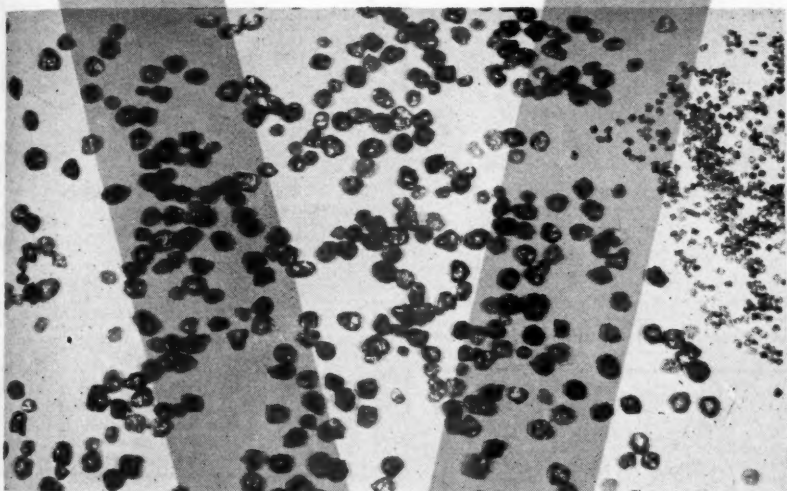
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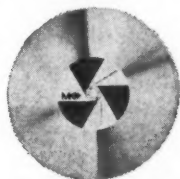
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Pyrite	Bornite	Smithsonite	Ilmenite	Collophane
Sulfur	Braunite	Sillimanite	Columbite	Chalcocite
Quartz	Enargite	Molybdenite (in Vial)	Diatomite	Polyhalite
Galena	Smaltite	Arsenopyrite	Magnesite	Pyrolusite
Gypsum	Cryolite	Tetrahedrite	Spodumene	Sphalerite
Barite	Goethite	Hemimorphite	Celestite	Andalusite
Bauxite	Limonite	Strontianite	Scheelite	Chrysotile
Calcite	Fluorite	Wollastonite	Carnotite	Garnierite
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Franklinite	Opal*	Crystal	Bakerite	Turquoise*
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Chrysocolla	Howlite	Agatized Dinosaur Bone	Jarosite	Jasp Agate
Psilomelane	Ilvaite	Topaz* - 1/4" Crystal	Linarite	Antigorite
Piedmontite	Martite	Grossularite Garnet*	Siderite	Norbergite
Conicalcrite	Kernite	Indian Moss Agate *	Allanite	Vanadinite
Dumortierite	Ulexite	Andradite Garnet*	Selenite	Aventurine
Scapolite	Idocrase	Golden Tigereye*	Willemite	Forsterite
Hydrozincite	Inderite	Dendritic Agate	Rhodonite	Pyrrhotite
Aphthitalite	Priceite	Opalized Wood*	Allophane	Colemanite
Smoky Quartz	Spurrite	Hydromagnesite	Wulfenite	Malposite
Clinzoisite	Mimetite	Nephrite Jade*	Witherite	Jasp-Opal*
Pyrophyllite	Zoisite	Meyerhoferite	Marcasite	Schefferite
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Serpentine	Apatite	Siliceous Sinter	Basalt	Sandstone
Anthracite	Diopside	Oolitic Hematite	Marble	Omphacite
Glauconite	Andesine	Almandine Garnet*	Gabbro	Anorthite
Barkevikite	Alurgite	Obsidian (Flowering)	Pumice	Quartzite
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